BOSTON UNIVERSITY

COLLEGE OF BUSINESS ADMINISTRATION

THESIS

STABLE MONEY

by

Lawrence Irving Dolan

(B.B.A. Boston University)
1927

Submitted in partial fulfillment of
the requirement for the degree of

MASTER OF BUSINESS ADMINISTRATION

1939

TABLE OF CONTENTS

Page

Page

INTRODUCTION

> "It is inconceivable that the world will be content for long 'like a blind horse, to starve knee-deep in corn,' to tolerate want with abundance all around, the destruction of food while men and women and children are perishing for the lack of it. And, if sound finance continues to put forward such a demand, then at the last it will be so much the worse for sound finance."[1]

Are we living in an age of plenty, or is it mere rhetoric to talk about starvation in the midst of plenty? Is there enough to go around? And if there is not, is modern industry capable of producing enough to go around? Possibly we produce too much. Is overproduction the cause of all our woes? Are unemployment and poverty the natural consequences of overproduction? There is too much grain in the West. The boll-weevils that were imported for the purpose of destroying the cotton crops[2] were not as efficient as they were expected to be, so we are burdened by the largest cotton crop in history. There are excessive inventories of cloth, shoes, and hardware in New England. Elsewhere there are huge inventories of copper, pig iron, and other metals. The child of the New England workman has the rickets for want of food, while the cattleman

1 The Breakdown of Money, Christopher Hollis, p. 211.
2 The Role of Money, Frederick Soddy, p. 15.

and sheep-herder are cold for want to shoes and woolen cloth. It would seem reasonable to suppose that an intelligent civilization could find a way to get the shoes into the West and the products of the West into New England in sufficient quantities to end this state of affairs. If it were merely a question of moving the products we would probably find that there is too much transportation. In the face of poverty, insecurity, hard work, scanty living, starvation, and disease, we continue to empty milk into the rivers, burn wheat and coffee as fuel, and import pests to destroy the crops. We are certainly determined to have the poor always with us. As for the poor, whatever else they may lack, they still seem to possess the inclination and capacity to enjoy the blessing as recorded in Genesis: increase and multiply. For thousands of years they have enjoyed ascetic poverty; it has spiritual advantages. However, at no previous time in history was this spiritual advantage insured by overproduction. What will the historian of the future think of this type of civilization?

CHAPTER I

TECHNOLOGY AND MONETARY REFORM

The Obstruction of Productive Capacity

The simple arithmetic of the relationship between population, production, and capacity to produce, is astounding. Inanimate energy and the mechanization of industry, both in industry and agriculture, have enormously increased the output per man. There have been a great many studies made in recent years designed to show that our capacity to produce is enormously greater than we had supposed. Investigators estimate the productive income of the nation at widely varying figures, but the conclusions of reasonable and even conservative economists are surprisingly high. The per-family capacity of the country is placed well above $4,000 yearly in 1929 dollars. There is unanimity of opinion among investigators that standards of living could be very much higher if our labor capital and natural resources were properly used. Obviously, there are great statistical difficulties in estimating potential productive income of the United States. However, the ambitious researches of The National Survey of Product Capacity[1] give us a reasonable figure of

---

1 The Chart of Plenty, Harold Loeb and Associates, pp. 132 and 137.

approximately $135,000,000,000 yearly with present capital equipment. This survey was made by sixty technicians, economists, and engineers, financed by the Federal Government.

Estimates of Capacity

A similar study was made at the Brookings Institution by E. G. Nourse and others in an attempt to estimate total productive capacity. The results were published in 1934 in "America's Capacity to Produce". The investigators were extremely conservative in their calculations, but they still estimated that "our productive system as a whole was operating at about 80% of capacity in 1929".[1] There is considerable debate as to the relative merits of these two studies. The studies at the Brookings Institution are thought by some to be too conservative. Others hold that the conclusions of The National Survey of Potential Product Capacity are too optimistic. However, even the more conservative estimate placed capacity productivity at over $15,000,000,000 more than that attained in 1929. The economic world has accepted the general conclusion as to our enormously greater capacity to produce.

---

1 America's Capacity to Produce, Edwin G. Nourse and Associates, p. 416.

National Planning or Monetary Control

Authorities disagree widely as to whether money holds a merely passive role in our economy or whether it can be so managed as to increase materially our general well-being. Before we proceed further, let us reemphasize the major concept established to this point. Recent investigation has shown that our national productive capacity is enormously greater than we had supposed, and many economists hold that the solution of this problem of chronic underproduction has to do with money. The survey made by The National Survey of Potential Product Capacity,[1] which was mentioned previously, proved that the potential income of the United States is about $135,000,000,000 yearly. With national production running about $80,000,000,000 yearly below capacity we may well examine, very soberly, the challenging claims of monetary economists that the solution of this great problem is purely one of money.

Either some form of complete and nation-wide economic planning or a system in which the money media are controlled with a view to more equitable distribution and a socialized use of the factors of production must supersede the present anarchic system of individualistic capitalism and private control of exchange

---

1 The Chart of Plenty, Loeb and Associates, p. 137.

media. Of course, our industrialists and bankers work together in such admirable harmony that some might suspect that we have economic planning from this course now. When a score of our great corporations cut their inventories at about the same time that our bankers are calling loans we have all the evidences of planning, but not of a socialized character.

If we are ever to have a high standard of living we must somehow attain nearly maximum possible production of what the people need and desire. Maximum physical production assumes that all employables are at work and that the capital and resources of the nation are being used at maximum efficiency.

Proposals for national planning ignore the fact that demand is the best director of society's productive effort. It is not a question of deciding for society what products should be used. The problem is to increase the total production available for society's wants, and real wants are discoverable only by having purchasing power in the hands of the public. The problem of using our labor supply upon our natural resources and productive equipment fully and efficiently can be solved only by providing adequate purchasing power through the exchange media of money and credit. To accomplish this, some degree of socialization of the

exchange media must take place, for at present, however hard our laborers would like to work, or however hard they do work, the food, shelter and clothing of the American people depend largely, too largely, upon bookkeeping entries on the records of about 15,000 banks; that is, upon a modern form of "wild cat" banking liabilities -- deposit currency.

The Frustration of Industrial Science

The communists insist that the poor are being exploited and it is utterly futile to deny this patent truth. Herein lies the moral appeal of communism and every other plan of socialization. Since the very beginning of the industrial revolution capitalism has obstructed the progress of technology. From the start, the capitalist was interested not in making goods but in making money. Whatever advantages modern society does possess are to be credited to scientific improvements in our methods of industry resulting not from capitalism, rather in spite of the system. An upstart system of laissez faire capitalism, born with the industrial revolution, pretends to have God on its side. But since the world began has there been a time when the destructive and obstructive practices of the nineteenth and twentieth century were the rule? Stuart Chase has a photograph of a pile of oranges, excellent fruit, a

mile long and ten feet deep thrown away to rot. This is not a mere meaningless illustration. It is a striking, but typical example, of destruction which is an inherent part of the business of insuring profits. In 1932 productive income in the United States had shrunk to $35,000,000,000 yearly. What difference did it make that technology had made it possible to produce an income yearly of $135,000,000,000? Such vast production was not consistent with the aims of twentieth century capitalism. Such production would have permitted a decent standard of living for every family and done away with the scarcity from which capitalistic individualism thrives. Technical improvements have equipped the nation with inanimate energy equal to forty times as much per person as was available a hundred years ago. However, the inanimate energy goes to waste, the factories are closed, the workmen idle, and the resources are needlessly destroyed by the most wanton exploitation.

It is not the purpose of this paper to defend socialism in any form, but it must be recognized at the start that if the efforts of our industrial scientists are deliberately frustrated by capitalistic society, some violent form of socialization is an inevitable certainty. The Soviet termites that are supposed to

be undermining our institutions can hardly be worse than the liberalist vermin that we have inherited from the days of Adam Smith. The devil that we know may not be worse than the devil we don't know, but there is a limit to tolerance in the social body.

It is probable that we have little choice in the matter. The inherent rottenness of capitalistic financialism is so fundamental that it is politically and psychologically impossible to correct its evils. For this reason farsighted liberals are looking for revolution-proof investments.

"Crackpots" or Bankers

Public apathy is insuring the doom of representative constitutional government. Not that the individual citizen is culpable. The responsibility of citizenship is difficult in our modern complicated society. The majority are humdrum, lacking the capacity to understand even the simpler facts of modern economic society. Furthermore, they are easily misled by interested pressure groups. Even those few who would assume the responsibilities of citizenship are victims of deliberate deception. Their newspapers, periodicals and radios are merely vehicles of misinformation. To educate such a public, to stir up righteous indignation, to get action, is a Herculean task, and there is no

modern Hercules strong enough to accomplish this against the highly subsidized propaganda of the great interests. The average local commercial banker is honest, valuable to the community, an expert, and thoroughly informed in his own business. His business is concerned chiefly with the making of loans. He should and does know the credit capacity of his customers. His business is not that of the astute central banker. He does not deal with monetary management. His apathy in social monetary problems is quite as apparent as that of the average citizen. Such interest as he does have will not interfere with his golf and is likely not to go beyond an occasional casual thought that follows the stereotyped Rotary Club doctrine on such matters. A brief conversation with the Vice President of any bank will disclose how deep the ignorance lies. As Professor Fisher says:

> "The popular notions, including those of ordinary bankers, are as primitive as the superstitions of a Russian peasant before the War, Such notions are: 'It is a matter of honor to keep on gold' (instead of on a stable standard); 'Inflation is always wrong' (even to correct deflation); 'We must not tinker with the currency' (even when it needs mending); 'Irredeemable paper is unsound' (even when it is stable); 'Money should be hard money;'"

and so on. But of the fundamental principles, if any, behind such precepts, he is blissfully unaware.[1]

---

1 Stable Money, Irving Fisher, Introduction, p. xx

The Artificial Credit Cycle

There is a carefully fostered belief that the business depression with its immense social, moral and material loss is unavoidable. Crises and depressions are accepted therefore as the thorns in the rose garden of Capitalism and are believed to be just as natural. The various phases of the cycle are supposed to be as inevitable as the tides, and some innocent folk are so naive as to suppose that its various phases follow a well defined course such as we would habitually associate with the movements of the celestial bodies. They borrow from the physical sciences the idea that what goes up must come down and disclaim all responsibility for its coming down. Such ideas have misleading connotations when used to describe the business cycle. Prosperity, crisis, depression, and revival are not natural phenomena. They are the direct result of the credit cycle, and the credit cycle is certainly not a natural phenomenon. It is rather an artificial device, a diabolical invention which is managed, controlled, and directed for the conscious purpose of thwarting civilization's attempt to feed and clothe the underprivileged castes.

The deliberate ensnaring of the unwary enterpriser by astute central bankers is still a favorite financial pastime. Large scale insolvencies are induced by sudden contractions of credit. This practice,

called a corrective remedy by the financial papers, not only proves fatal to individual enterprisers, but what is much more important, it has far-reaching results -- both nationally and internationally. Both modern depressions and modern wars are traceable to this crafty scheme -- monetary and credit mismanagement. Capitalistic nations have watched the rise of powerful totalitarian states and the hectic scramble to arm with all of the devices of destruction that ingenuity can devise. This scramble is due to a need for economic goods to complement their respective national economic needs. Here we have duplicated in international markets the same cruel and needless creation of shortages that bedevils all honest attempts to supply the reasonable needs of domestic desire. Hitler is going to fight to obtain somewhere the very things that we plow under and the finished goods that our factories might have produced if billions of dollars of credit had not been called, if there had not been wanton destruction of our deposit currency.

Central Bankers Interested Parties

Mr. John Maynard Keynes expresses sympathy for the reasonable doubts of practical men and says: "I do not think that practical bankers are primarily blameworthy."[1] Other and more conservative economists

---

1 A Treatise on Money, John Maynard Keynes, p. 405

are also reluctant to believe that bankers, surrounded as they are by the trappings of respectability, can be guilty of inducing depressions by directing deflation with the secret objective of withholding the benefits of technical progress from the working classes. The mere suggestion of such a thing is very disturbing to these charitable souls, and will, so they believe, ultimately cause serious disruption in the social order. These persons were the most surprised when Richard Whitney, former president of the New York Stock Exchange, recently changed his address to Sing Sing. This incident and others of the same kind are merely the surface indication of a monstrous moral decadence in financial circles. Individual financiers may well be above suspicion. However, the system is inherently dishonest, the financier's means of attaining his objectives is unconstitutional, and the sinister consequences reported in the daily newspapers from the war fronts of the world are positively inhuman.

I do not question the sincerity of every banker or economist that disagrees with me on the vital question of monetary management. Nor do I suspect every one who does not share my conviction in regard to the inherent dishonesty of modern banking. However, the stakes are high. Billions are involved. And we must

not forget that great volumes of the literature on monetary economics have been written by interested parties. Indeed, much of our legislation has been written by men whose closest associates have been in the employ of our great banks. The monetary economist without such connections, whose opinions are therefore less circumscribed, and whose services are not bought and paid for by interested parties, is likely to be nearer the unbiased and simple truth. As Senator Robert L. Owen, co-author of the Federal Reserve Act says:

> "Knowledge of the Science (of money) has been made difficult by those who have converted these simple principles into an enigma. They have done so with ponderous volumes written on prices and on the processes of production, transportation, distribution, and allied topics; weaving into the subject matter deceptive terms so that the public has been grossly misled by the use of words which contain accepted false premises."[1]

In the heated controversies of today it has become the custom to refer to monetary and banking authorities who are on "our side" as financial experts; if they do not agree with us they are "crackpots" or they belong to the "fringe of lunacy", or they are merely theorists. Senator Owen, who has been

---

1 Foreword to Money Creators by Senator Robert L. Owen, p. 5, Gertrude M. Coogan.

a consistent advocate of mandatory stabilization, will doubtless earn for himself all of the above mentioned compliments and more. However, it is still permissible, with elaborate apologies, to suggest that the senator's appointment to the Chairmanship of the Senate Finance Committee was backed by qualifications which should have been satisfactory to the most smug of business men. He has been president of a bank for ten years and a director for forty-five years. Furthermore, he had "studied at first hand the Bank of England through its Governors; the Bank of France through its Governor and expert advisers, and the Reichsbank through its Directors."[1]

Leading authorities in economics and practical men of affairs in banking and in the legislatures have for decades advocated various legislative measures to bring about more stable money. The most formidable opposition has come from central bankers. Such opposition is, of course, to be expected, as such legislation would of necessity limit the powers of central bankers and regulate some of their most important activities. However, as interested parties, officials of central banks are not to be credited with the best judgment as to the wisdom of such legislation. There is still too

---

1 Money Creators, Gertrude M. Coogan, Foreword by Robert L. Owen, p. IX.

much truth in a statement credited to the founder of the House of Rothchild: "Give me control of money and credit and I care not who makes the laws".

CHAPTER II

STABLE MONEY CONCEPTS

Conflict of Opinion

Speaking pontifically for central bankers, the late H. Parker Willis dismissed the whole matter of stabilization as a mirage, and holds that no stabilization plan is feasible. Furthermore, he states that other central banking services are of primary importance and that there should be no interference with their performance. He says:

> "The central bank has a mission to perform as a bank, that is urgent: that of maintaining liquidity and redeemability in the affairs of the community, that of protecting the basic monetary standard of the community, whatever that may be, and that of guaranteeing a fair and even access to its supply of credit."[1]

Obviously, all three services are important, but it is impossible to render them without stabilization. How, for instance, could liquidity be maintained during the period of falling prices from 1929 to 1932? It doesn't make sense to talk about protecting the basic monetary standard during a period of instability such as Germany experienced during its post-war inflation period. During any period of falling prices a central bank

---

1. The Theory and Practice of Central Banking, H. Parker Willis, p. 54.

simply cannot guarantee "a fair and even access to its supply of credit". This service can be rendered to member banks, but not to the community; and it is a much more vital consideration that the community receive adequate credit.

Dr. Willis was considered one of the leading authorities on banking in the United States. However, he was with the minority on this question, for a very great majority of writers on monetary problems have stressed both the desirability and the feasibility of stabilizing the price level. The belief is becoming more and more firmly established that the problem of a stable price level will soon be solved and, furthermore, that the solution, when we have it, will be simple. There is great variation in the ways and means proposed, but few writers who do not recognize that stability is the primary objective. The movement has been championed by such men as Owen D. Young, who said: "You need not try to 'sell' me on your proposition; for I think it is about the most important thing in the world -- economically. What convinced me was my experience in Germany on the Dawes Commission. I found that the one great need was the stable mark."[1] A great change in the purchasing power of the monetary unit -- the pound, the dollar, or any other unit -- is a calamity which is also

---

1 Stable Money, Irving Fisher, p. XVII.

the prime cause of business depression and other social injustices.

Senator Robert L. Owen, as Chairman of the Senate Committee on Banking, inserted in the original Federal Reserve Bill a provision requiring "that the powers of the Reserve System be employed in the service of commerce and to promote a STABLE price level". The meaning of this provision, according to Senator Owen, "was to establish and maintain the stable value of money under mandate".[1] The senator explained further that this mandatory provision was stricken out in the House under the leadership of Hon. Carter Glass, and that he was unable to keep the mandatory provision in the Bill because of the secret hostilities developed against it, the origin of which he did not fully understand at that time.

Roosevelt's Variable Policy

In the early days of President Roosevelt's first administration advocates of stable money got temporary encouragement from numerous statements stressing the need for price-level stabilization. On July 3, 1933, the President sent a message to the London Economic Conference which was typical of his stand on the stable money question. It seemed honest

1 Money Creators, Gertrude M. Coogan, Foreword, Robert L. Owen, p. ix.

at the time and unmistakeable as to its meaning

> "So, too, old fetishes of so-called international bankers are being replaced by efforts to plan national currencies with the objective of giving to those currencies a continuing purchasing power which does not greatly vary in terms of commodities and the need of modern civilization. Let me be frank in saying that the United States seeks the kind of dollar which a generation hence will have the same purchasing and debt-paying power as the dollar we hope to attain in the near future."[1]

The President may have been sincere, but his subsequent monetary program probably did incalculable harm to the stable money movement. The deliberate deflation and consequent business depression of 1937-38 are only part of the case against the monetary authorities of this administration. It is remarkable how often both supporters and opponents of the President have been mistaken in their interpretation of presidential statements.

Consequences of Price Instability

The importance of stability cannot possibly be overestimated. Unemployment, labor troubles, and civil disturbances of all kinds, are a direct result of price changes. It is probably no exaggeration to say that even war is less important as a cause of suffering than instability, for war is usually traceable

---

1. The Money Muddle, James P. Warburg, p. 118.

to this cause. Few revolutions have occurred for any other reason. The collapse of the mark accounts for Hitler. The fall of the ruble paved the way for Bolshevism. Few people realize that the American revolution probably would not have occurred but for a drastic fall of prices immediately preceding. In two and a half years, from October 1772 to April 1775, the price level fell 21%.[1] American history following the revolution also throws light on the importance of an unstable price level. During the critical period prior to the signing of the Constitution prices fell from an index number of 232 to 82. Is it any wonder that the colonies very nearly returned to the British Empire? Fortunately for Washington's administration and the new republic the price level began to rise in 1788 and continued to do so during both of his administrations. The Napoleonic wars which caused a 70% rise in American prices also insured Washington's popularity even to the present time.

Great historical changes take place with the fluctuations of the price level. The declining prestige of individual presidents in our day, and the fall of dynasties in the past, are alike traceable to falling prices. The rise and fall of William Jennings Bryan was due to changes in the general level of prices. The

---

1 Gold and Prices, Warren and Pearson, p. 12.

defeat of the Republican Party and Mr. Hoover in 1932 occurred after a 35 per cent decline in prices. Roosevelt's popularity fluctuates with the rise and fall of commodity indexes and his public following can be measured with a graph of changing prices.

Yardstick of Value

Professor Edwin Walter Kemmerer has made an enlightening comparison by translating the purchasing power of the dollar into inches. Using 1913 as the base year the purchasing power of the dollar was given as 36 inches, the length of the yardstick. The fluctuations in our measure of value from 1896 to 1932 were then expressed as in the following table:

Table I -- Purchasing Power of Dollar
Expressed in Inches 1896 to 1932
(1913 -- 36 inches)[a]

Year	Inches
1896	51
1913	36
1920	19
1922	23
1929	20
1932	27

a Kemmerer on Money, p. 10

A shrinkage of one ten-thousandth of an inch in our unit of measurement is a matter of grave concern to our Bureau of Weights and Measures. Such a change is

adjusted after painstaking scientific investigation. However, our measure of value has <u>not</u> been so carefully guarded. Yet we live in a world that is governed by price. Not only is every transaction measured in terms of money, but one-half of the transaction <u>is</u> money. Until recently the illusion was universal that the unit of value remained fixed. Through the use of index numbers monetary scientists now know that the idea of a fixed unit of value was an illusion and the approximate extent of variations in the measure of value can now be determined.

What a jigsaw of confusion this world would be if some queer power could change our various units of measure, if inches and pounds could be made variables without our being conscious of either the fact or the extent of the charge! Those who enjoy gambling would probably find it very zestful. The variable monetary unit of value makes gamblers of us all, and the pity of it is that the aged and the weak lose in the gamble.

Fixity of Mint Price

When the term "stabilization" was used in connection with money in the past it referred to the weight and fineness of the metal coins that circulated as money. Since commodity money was used exclusively, it is natural that early advocates of stabilization

should insist upon fixity in the mint price of the metal used for money. When representative paper money took the place of the coins as the circulating medium, stabilization meant fixity of the number of grains of metal into which the paper was convertible. Later, the liabilities of banks and governments, in the form of bank notes and government notes, became the principle circulating medium. Stability still meant, not relative stability, but fixity in the mint price, and behind a superstructure of paper money there was supposed to be adequate metal reserves with which to redeem any and all paper at the mint price. In the United States up to 1873 the dollar was 412.5 grains of silver 9/10 fine, or 25.8 grains of gold 9/10 fine. Since that year, and until the recent devaluation, the dollar was defined in terms of gold only, and remained fixed at 25.8 grains of gold 9/10 fine. Now the dollar is 15 5/21 grains of gold 9/10 fine. Many still refuse to accept any definition but the rather narrow meaning of the term "stability," a meaning which refers to the weight and fineness of the metal coins. Behind this backward-looking prejudice is the notion that money is gold and nothing else.

Every commodity has its own pressure group, interested in the value of the thing that it controls. The commodity, gold, is no exception. A small but

powerful group is naturally interested in preventing schemes to stabilize a thousand and one commodities if such stabilization means robbing gold of its fixity of price. This is basically the reason for the reluctance in some quarters to admit that stabilization, in modern monetary economics, means much more than mere fixity in the mint price.

Fixed Ratios in Foreign Exchange

Stabilization, in the minds of some, is identified with the problem of maintaining fixed ratios between the various currencies in foreign exchange. It is to them the problem of keeping the dollar, the pound, the mark, the franc, etc., at fixed prices in relation to each other. At the London Economic Conference, the Chancellor of the British Exchequer, Neville Chamberlain, stated that, in his opinion, stable exchange rates were of first importance and should therefore precede stabilization of domestic price levels. His stand on this question is typical of that of representatives of nations enjoying a large international trade which is hampered by the uncertainties caused by fluctuating exchange rates. There is no doubt that stability in foreign exchange is greatly to be desired, but not if the cost is too great. President Roosevelt evidently thought that the price was too great at the time of the London Economic Conference.

In any case his message, stressing the need for domestic price stability, shocked the sensitive members of the American delegation, and ended the conference. Temporarily, the leading countries of the world are experimenting with plans to stabilize domestic prices and hoping that some practical plan will evolve whereby it will be possible also to return to more stable arrangements in foreign exchange. In view of present chaotic economic and political conditions throughout the world, stabilization of both domestic purchasing power and foreign exchange rates is impossible.

Flexible Equilibrium

Much confusion could be avoided if there was more agreement as to what is meant by "stability". In this paper "stability" means a reasonably stable, general price level. No competent economist believes that absolute fixation of prices is either desirable or attainable. On the other hand, the elimination of wide variations in the purchasing power of the dollar is recognized to be both necessary and a practical possibility. Undoubtedly, moderate fluctuations of the general level of prices will continue to occur after we have exhausted all known devices. However, there is no reason why the more violent fluctuations cannot be smoothed out. A fall in the price level can

be stopped far short of a forty per cent deflation. Experience with monetary management abroad seems to indicate that prices can be confined within limits of about three per cent. Such narrow limits might not be practical in a large industrial country like the United States, but if it is true, as competent authorities believe, that prices can be raised or lowered or stabilized at will, then the narrower the area within which prices are allowed to fluctuate the better. Professor Irving Fisher, a persistent advocate of stable money, points out the futility of trying to "peg" individual prices, and suggests that "it is easier to control the level of a mill pond than it is to control the ripples on the surface".

It may seem unnecessary to explain that the problem of stabilizing the purchasing power of the dollar has nothing to do with price fixing in individual commodities. Attempts at price fixing in the wheat markets and similar experiments such as the valorization scheme in Brazil have never proved successful. The relative importance of various commodities is measured by their price relationships. Disparities in their various price trends disclose important changes that are taking place in their several demand and supply relationships. Advocates

of stable money oppose price fixing schemes, not only because they retard recovery but also because such devices are basically uneconomic. Furthermore, by confusing the issue they prevent a proper understanding of what is meant by stable money. Price fixing usually involves a tax on the rest of the community. If a price is controlled by subsidizing a commodity the subsidy must come out of the general tax. If the price is maintained by destroying goods or crops the public pays a tax through higher prices. The same is true if there is limitation of production. A somewhat more usual device to maintain the price of an individual commodity, and one which also involves a tax, is the raising of a tariff barrier. If the fallacies underlying the above practices were carried to their logical conclusion we would have general inpoverishment. The poverty problem of a relatively small pressure group may be partially solved by the physical destruction of plentifulness of a commodity which the community in general might have enjoyed. Stable money advocates are the farmers' best friends. However, they cannot logically support farm relief measures designed to raise or control the prices of individual commodities through restrictive measures.

Index Numbers Evaluated

Statistical refinements in the making of index numbers have enabled us to discover trends and trends within trends. We can tell whether a price trend is of a secular or cyclical nature. We know what the retail and wholesale price series are doing. We calculate with precision disparities between agricultural and industrial prices. We have cost-of-living indexes and general purpose indexes. There are sensitive indexes and those that do not respond so quickly. While it cannot be said that authorities have agreed upon what index would be most suitable there is agreement among students of stable money that stabilization through the use of any index would be better than no stabilization at all. Opponents of stabilization plans argue that there is no agreement as to what should be stabilized, and while this is true, it should be realized that this is of minor importance. Various indexes tend to move in the same direction. The cost-of-living index usually follows the wholesale price index, although the price range is not so great. Some degree of dispersion is to be expected no matter what index we adopt as a guide. The argument of opponents seems to be that since we have no 100% perfect index that we should abandon all plans to stabilize. If this were a logical position to take

we should abandon all other economic plans as well. Disparities between the indexes would doubtless be much less marked if any index were stabilized.

Leading authorities are more nearly agreed upon wholesale price indexes as a guide to stabilization. Cost-of-living indexes move too slowly, and consequently have little forecasting value. Furthermore, they do not fluctuate so widely as do the wholesale indexes, and at times they do not fall at all when major recessions are already under way. The cost-of-living indexes might be of use in stabilizing the long-term, or secular trend. However, since it would be impractical to use two different indexes, and since wholesale indexes anticipate movements in the cost-of-living series, the former would seem to be of more practical use. What is probably the correct point of view on this question was stated in the Annual Report of the Federal Reserve Board for 1923:

> "When the business outlook is inviting, business men are apt to adventure and new business commitments are made in increasing volume. But only later will these commitments be reflected in the possible rise of prices and an increase in the volume of credit provided by the commercial banks of the country. The Federal Reserve Banks will not to any considerable extent feel the impact of the increased demand for credit until the whole train of antecedent circumstances which has occasioned it is well advanced on its course;

> that is, until a forward movement of business, no matter from what impulse it is proceeding, has gained momentum. Credit administration must be cognizant of what is under way or in process in the movement of business before it is registered in the price index. The price index records an established fact."[1]

Debtors and Creditors

Violent price movements not only cause great losses in total productivity to the community as a whole, but they also cause grave injustices to various classes. Debtors as a class are injured by falling prices; creditors are benefited. There is no way that the debtor can escape the burden. If he has a debt to pay at a time when dollars have increased in value, he will either have to part with more goods than he obtained with the loan to raise the money, or if he is obliged to earn the money, the amount that is obtainable for a day's work will be less. In other words it takes more in goods and services to pay a debt if prices have fallen. Let us take for illustrative purposes a purchaser of a home in 1926. Assume that the purchaser paid $10,000 for his home, of which sum he borrowed $6,000 on a mortgage. Between 1926 and 1932 the general level of prices, according to the index of the United States Bureau of Labor Statistics, fell 40%.

---

1 Annual Report of the Federal Reserve Board, 1923, p. 32.
Quoted in Money, Bank Credit, and Prices, Lionel Edie, p. 458.

Real estate fell by approximately the same amount. If the home owner held his property, he found the payments on the principal and interest much more burdensome than he had anticipated. If he sold the property to pay the mortgage he found that he had to give the whole property, for which he had originally paid $10,000, to liquidate the $6,000 debt. This was not at all uncommon. In fact it was so common that banks throughout the country found themselves in the real estate business.

Some are both debtors and creditors. For instance, the owner of a home on which there is a mortgage may also be the holder of an insurance policy. As such he is a creditor. The burden of the mortgage is offset by an increase in the purchasing power value of his insurance policy. His gain may seem theoretical. However, during a period when there has been a 40% decrease in the general price level, each dollar of an insurance policy has increased in purchasing power to a dollar and sixty-seven cents. During periods of changing prices sympathy is wasted on insurance companies and banks for the same reason. Their financial position is hedged by the nature of their business.

CHAPTER III

EVOLUTION OF THE IDEA OF STABLE MONEY

350 Years of Iron Money in Sparta

There is nothing new under the sun. The ancient Spartans, 840 B.C., adopted a managed currency. It was irredeemable and apparently had little or no intrinsic value. Unlike some of our "sound" modern systems this fiat currency continued to work for several hundred years. The precious metals, gold and silver, were barred from the country, and the currency, which consisted of iron disks, served the purpose of an ideal medium of exchange. Their intrinsic value was controlled by the volume issued. This is not an isolated historical curiosity. Inconvertible currencies were used successfully by several ancient states. In 350 B.C. Plato described a monetary system in which precious metals were used in international trade with valueless media to be used nationally. Essentially the plan was the same as that advocated recently by John Maynard Keynes. Modern governments were forced to adopt such plans because the fair-weather gold standard broke down. Most of our texts state categorically that money must have value. Yet the wise old Greeks knew many centuries ago that the

ideal money must be valueless. The iron disks used for money were treated so that they would not be of any use as malleable iron. The purpose was to make them as nearly valueless in themselves as possible. They were to be merely tokens or counters and as such they did perform perfectly the function of a medium of exchange.[1]

"Numerical" Money Systems -- Del Mar Cited

Alexander Del Mar, formerly a Director of the United States Bureau of Labor Statistics, member of the United States Monetary Commission of 1876, has made careful studies of ancient money systems. He describes what he calls "numerical" money systems which, he maintains, served the purposes of money better than precious metals ever did. Del Mar regarded paper money as ideal. He has shown that the decline of great ancient states began with the adoption of currencies having intrinsic value.[2] There is no such thing as stability in the value of any commodity, including gold. It is understandable, therefore, that economic stability is impossible while any kind of commodity is used for money. In order to insure the continuance of a fiat money

1 Stable Money, Irving Fisher, p. 6.
2 History of the Precious Metals, Alexander Del Mar, p. 86.

system the Spartans forbade the production and importation of both gold and silver. Any gold or silver acquired by conquest was stored abroad. Our monetary authorities are moving in the same direction in the nationalization of our gold and its physical removal to Fort Knox. Unfortunately, our financiers do not share the monetary rectitude of the ancient Greeks in other respects. Nor do they share their wisdom. As Norman Angell says:

> "Certain it is that some of the Athenian writers wrote more understandingly on the subject than any until, perhaps, Adam Smith. Aristotle seems to have held clearly to the distinction between money and wealth, which it is so difficult for the ordinary man to maintain once he has become accustomed to the use of money and to seeing that it can usually be exchanged for wealth. Aristotle notes the existence in his time of a theory that it is a matter of comparative indifference what material is used for money. Plato's reference to money as a 'symbol or token' seems to indicate that he is in sympathy with this view; and this conclusion is strengthened by his proposal in the Laws that for a domestic trade a token-money established by law should be used, gold and silver being restricted to transactions with foreigners."[1]

To the dull mind of the modern American it is hard to comprehend that a worthless token regulated by governmental edict can represent his claim to goods

---

1 The Story of Money, Norman Angell, p. 97.

and services, to his share of society's productive effort. Yet he uses hat checks that do not equal the value of his hat.

Rise of Commodity Money and Decline of Rome -- Wells Cited

Early Romans also hit upon the idea of regulating the quantity and the value of fiat currency. Their system of legal tender money may have been borrowed from the Greeks. It was established about 385 B.C. and lasted for over a century. Alexander Del Mar holds that the numismatic relics which have been so long regarded by the learned world as copper coins were essentially irredeemable notes stamped (for lack of paper) on copper, and devised and designed to pass, in the exchanges, for a much greater value than that of the material of which they were composed. It is Del Mar's opinion that the Roman Republic deliberately and purposely adopted what today would be called an irredeemable paper currency. The Roman Senate controlled and regulated the issue and jealously guarded the privilege, a fact which the American Congress might well copy. After Rome abandoned, almost unconsciously, the system of irredeemable currency, the monetary history of Rome became a long and unbroken story of

fluctuating values, depreciation, inflation, debasement, devaluation, currency manipulation, and fraud such as the plating of coins. Nearly all of the evils of monetary history were experienced by Rome. Although some of their difficulties were not clearly understood, such as the difficulties incident to a bimetallic or multimetalic system, they nevertheless experienced these difficulties. As H. G. Wells puts it, "Money floated the Romans off the firm ground." The Romans did not share the monetary integrity of the Greeks. Their attempts to use money which in itself left them subject to all the dire consequences of a medium which fluctuates in value by its very nature. Currency having intrinsic value also lent itself to the scheming manipulators who debased it and otherwise caused its value to change artificially. So, as H. G. Wells says again, "We who can look at the problem with a large perspective can see that what happened to Rome was 'money'".[1]

Money as Social Bookkeeping

There is a great deal of evidence, and many able students of monetary history are convinced, that ancient peoples did live under systems of managed currency. Apparently, also, these systems of managed

---

1. The Outline of History, p. 234; quoted in The Story of Money, Norman Angell, p. 105.

currency served their purpose far better than the commodity currencies which the same peoples used at later periods. Economic life was so simple in ancient times that managed currency did not have to be adapted to an elaborate system of banking. It probably seemed logical to them that the value of money should be a matter of social bookkeeping and that its quantity must necessarily be limited. The quantity was apparently regulated by public authority, and had nothing whatever to do with the material with which it was composed.

Managed Money in China

Many ancient peoples believed that prices could be controlled by legal enactment. It is probable that most of the great dynasties of China enjoyed managed currency systems of one kind or another at various times. The writings of the early Chinese philosophers show that they understood the problems of stabilization very well. Furthermore, Chinese rulers tested those principles at various periods. The following principle which is credited to Kuan Tzu, who died in 644 B.C., is typical: "The Government should control the ratio between money and commodities by issuing and redeeming money".[1] Managed

---

1 Chan Huan Chang, The Economic Principle of Confucious and His School; quoted in Stable Money, Irving Fisher, p. 7.

valueless currencies were far from being isolated curiosities in ancient times. They were, in fact, quite common and were successful over long periods of time. The classical example is of course the Spartan system which continued for about three hundred and fifty years.

200 Years of "Gentle Inflation", 1150-1350

From 1150 to 1350 an interesting monetary development took place in central Europe. The rulers of various states would call in the silver coins, called bracteates, for purposes of recoinage. They were called in as often as twice a year. The recoinage involved debasement as it was the custom to charge a seignorage fee of about 25%.[1] Since these coins were subject to a steady depreciation, holders naturally could not profitably hoard them. In fact it was to the holder's interest to get rid of them as quickly as possible. They were convenient for the making of change. Prior to this time central Europe had no coins in small denominations. They had other notable advantages, but the important feature of this curious monetary development was their velocity of circulation. The desire to hold goods instead of coins proved to be very stimulating to trade. The

---

1 Stable Money, Irving Fisher, p. 9.

rulers of that day doubtless did not understand the effect of this velocity control. Later writers, however, realized that this period of revival from 1150 to 1350 profited from the fact that at no time during these two hundred years was there a period of falling prices. The steady depreciation of the coins made this a period of slowly rising prices. It was a period of mild inflation, from which there was no reaction. One might take an altogether too narrow view of this development and ascribe the great revival of the twelfth century to the gentle inflation of the time. We can at least claim that this gentle inflation was a contributing cause. It was a very fortuitous circumstance that the Renaissance was not impeded by any period of deflation.

Trend Toward a More Scientific Standard

During more modern times results obtained from conscious efforts to attain a more stable price level have been disappointing. Progress has been slow and many mistakes have been made. Society has been hampered by the persistent superstition that money must have value. All history proves that money which has intrinsic value defies all attempts to stabilize it. Step by step society is moving toward a scientific money system. Under the terrific strain of modern wars

and twentieth century business depressions, nations have been forced to adopt monetary devices which were believed to be unsound. The world is like a great laboratory today in which these supposedly unsound monetary devices are subjected to scientific observation. For instance, monetary experts are giving careful consideration to the unbelievably successful experiment in Sweden where a stable price level has been maintained for several years through the use of an irredeemable paper currency.

Step by step society is discovering the nature of monetary difficulties and their causes. There have been periods of inflation resulting in chaotic conditions when even the monetary authorities did not understand what was taking place. Now, our concepts are clearer. From crude recognition of the problem and study of remedies during the past few hundred years we are gradually evolving a scientific money theory.

The concept of an unstable monetary unit was understood in earlier centuries, a clearer idea of the problems involved in stabilizing the value of money has grown steadily decade after decade. Seventeenth century writers recognized the fact that the purchasing power of money itself fluctuates. Sir

William Petty pointed out that "The value of Silver rises and falls itself; for Men make Vessels of coyned Silver, if they can gain by the Workmanship enough to defray the Destruction of the Coynage, and withal, more than they could expect by employing the same Silver in a way of Trade". He deplored the fact that speculators made profits at the expense of the ignorant public by taking advantage of price fluctuations. Freiherr Samuel Von Puffendorf (1632-1694) argued that the price of money must necessarily follow the price of the metal which is traded as a commodity in the market. He concluded that the price of the money must follow the scarcity or plentifulness of the metal. Early in the eighteenth century Bishop Fleetwood estimated that the value of money during two and a half centuries had decreased in the ratio of six to one. He arrived at this ratio by studies of price changes in certain important commodities. Later, through the use of index numbers these great price changes were definitely traced to the huge imports of gold and silver from America. Today it is recognized that other things being equal, the quantity of money and not its quality, determines the price level. This is now recognized as a truism.

William Petty pointed out that "The value of Silver rises and falls itself; for men make Vessels of coyned Silver, if they can gain by the Fashion enough to defray the destruction of the Coynage, and withal, more than they could expect by employing the same Silver in a way of Usance". He deplored the fact that speculators made profits at the expense of the ignorant public by taking advantage of price fluctuations. Freiherr Samuel Von Puffendorf (1632-1694) argued that the price of money must necessarily follow the price of the metal which is traded as a commodity in the market. He concluded that the price of the money must follow the scarcity or plentiful-ness of the metal. Early in the eighteenth century Bishop Fleetwood estimated that the value of money during two and a half centuries had decreased in the ratio of six to one. He arrived at this ratio by studies of price changes in certain important commodities. Later, through the use of index numbers these great price changes were definitely traced to the huge imports of gold and silver from America. Today it is recognized that other things being equal, the quantity of money and not its quality, determines the price level. This is now recognized as a truism.

Early Modern Concepts

In 1737 Bishop Berkley suggested that money itself be made a stable measure of value, "whether the true Idea of Money, as such, be not altogether that of a Ticket or Counter". In 1752 David Hume raised the question of public and private banking:

> "If the public provide not a bank, private bankers will take advantage of this circumstance..... And therefore 'tis better, it may be thought, that a public company should enjoy the benefit of that paper credit, which always will have place in every opulent kingdom. But to endeavor artificially to increase such credit, can never be to the interest of any trading nation; but must lay under disadvantages, by increasing money beyond its natural proportion to labour and commodities, and thereby heightening their price to the merchant and manufacturer."[1]

The inadequacy of precious metals was pointed out in 1767 by Sir James Steuart:

> "No material money, let it be contrived as it will, is exempted from vicissitudes in its value as a metal. This is proved by the universal risings and sinkings in the price of commodities, in consequence of circumstances peculiar to the coin. These risings and sinkings of prices, I say, are properly the risings and sinkings of the value of the coin, and this fluctuation again in the value of the coin, is a lengthening and contracting of the equal parts of the scale of value which is attached to it. Now there is no such thing

1 Political Discourses, "Of Money", p. 44; quoted in Stable Money, Irving Fisher, p. 15.

> as any vicissitudes in the prices OF ALL COMMODITIES with respect to bank money."[1]

Tabular Standard of Massachusetts, 1777

During the past few hundred years numerous proposals have been made and many practical steps have been taken to correct the injustice of rapidly changing price levels. About the middle of the eighteenth century the Colony of Massachusetts Bay had suffered from rapidly changing prices. During the Revolutionary War period, soldiers complained that their pay was not adequate to meet the rapidly changing prices. In 1777 a law was passed listing official prices of about fifty commodities. This price-fixing experiment did not work as it did not apply to the cost of producing the articles. Wages rose and, as is always the case with price-fixing schemes, the price-fixing experiment did little good. In order to correct the injustice to the soldiers, Massachusetts agreed to a scheme which has since been called the tabular standard. The soldiers' wages were adjusted as the prices of commodities fluctuated. If prices rose fifty per cent the soldiers' pay was increased by that percentage. At first the fifty commodities listed in the price-fixing law were used as

---

1 Political Discourses, "Of Money", p. 44; quoted in Stable Money, Irving Fisher, p. 17.

an index. Later four commodities; namely, beef, indian corn, sheeps' wool, and sole leather were substituted for the original fifty. The soldiers and the officers received their pay in "Depreciation Notes" which were payable in current money in such amounts as would make their purchasing power equal from month to month. The following is a quotation from one of these notes:

> "Both Principal and Interest to be paid in the then current Money of said State, in a greater or less Sum, according as Five Bushels of Corn, sixty-eight Pounds and four-seventh Parts of a Pound of Beef, Ten Pounds of Sheeps Wool, and Sixteen Pounds of Sole Leather shall then cost, more or less than One Hundred and Thirty Pounds of Current Money, at the then current Prices of said Articles...."[1]

Lack of Index Numbers

Early in the nineteenth century few people understood the reason for the high price of gold bullion. Concepts that are widely understood today were obscure even among bankers during Napoleonic war days. After the exhaustive studies made by the Bullion Committee, published in 1810, the right explanation was accepted. The bank had been steadily increasing the amount of inconvertible notes and the Committee concluded that the change in the price of

---

1 Quoted in Gold and Prices, Warren & Pearson, p. 24.

gold bullion was due to the excess of paper currency. David Ricardo led the fight to return to the gold standard. The opposition pointed out that few classes of society would be benefited by this return except the owners of money. It was understood that a contraction of the circulation medium would increase the value of money at the expense of society. While Ricardo advocated a constant price of gold he evidently thought that a stable standard is impossible. He said, "No plan can possibly be devised which will maintain money at an absolutely uniform value, because it will always be subject to these variations to which the commodity itself is subject, which has been fixed upon as a standard." Although Ricardo wrote extensively on prices and currency, he made little or no use of index numbers. The opinions of earlier writers doubtless would have been very difficult had this modern device been better understood. Ricardo believed that "while the precious metals continue to be the standard of our currency, money must necessarily undergo the same variations in value as those metals".[1] He was certainly right about that.

---

1 Proposals for an Economical and Secure Currency, David Ricardo, p. 22; quoted in Stable Money, Irving Fisher, p. 23.

Tabular Standard -- Jevons

After 1822 very definite proposals were made designed to correct the evils of instability. Some writers like Joseph Lowe, believing with Ricardo, that it is impossible to stabilize the value of money, recommended a tabular standard similar to that used so successfully in the Massachusetts Bay Colony during Revolutionary War days. Adjustments under this plan were to be discretionary with the contracting parties at first. Later, if the plan proved successful, it was to be made compulsory. Other writers, like John Rooke, advanced various theories in the belief that the monetary standard itself could be stabilized by regulating the quantity of money kept in circulation. Again the imperfection or lack of index numbers made for confused thinking.[1] A controversy arose as to whether farm wages or commodities should be stabilized. While it was recognized that definite dislocations in the money system might be prevented, no scientific method of accomplishing this end could be worked out without commodity price indexes or wage series. Furthermore, few had any conception of what is now referred to as the "money illusion". The concept of money based on an average of the mass of commodities

---

1 Cited in Stable Money, Irving Fisher, p. 26.

was too obscure for the average man and still is. Meanwhile, the Bank of England had a very profitable private monopoly and those connected with the Bank were naturally more interested in private profit than in public welfare.

W. Stanley Jevons considered the idea of a commodity dollar but abandoned it as impractical. He became an ardent advocate of the tabular standard. He also urged the abandonment of gold as a standard and argued that since gold had lost its stability all pretense for retaining it as the standard of value was gone. It was Jevons' belief that money cannot be made stable and therefore changes should be made in the value of deferred payments.

Inconvertible Paper

With the scientific development of index numbers clearer concepts of what can be done have evolved. Mr. J. Barr Robertson, before the Royal Commission on Gold and Silver in 1886, recommended the issuance of inconvertible paper currency based on the use of index numbers. He believed that such a measure would prevent falling prices and all resulting evil consequences. The Committee dismissed the theory.

<u>Marshall -- An Advocate of Managed Currency, 1887</u>

In 1887 Professor Alfred Marshall, Dean of English economists, took up the fight for a proper standard of purchasing power. The lack of a stable standard, he held, was the chief cause of the survival of the monstrous fallacy that there can be produced too much of everything.[1] Marshall's opinion on this question is a forerunner of the "poverty in the midst of plenty" arguments of recent years. When there is a general fall in prices a scarcity of money makes it appear that there is too much of everything. Instead of adjusting prices by relieving the scarcity we destroy inventories and limit production. It is fifty years since Marshall championed this cause. Our progress in monetary matters since that time is mainly theoretical. The evils that he pointed out are now acute. Unless they are corrected soon our type of civilization is doomed. The head of a Rothschild rolling in Austria is merely a foretaste of what is to come. Society in some parts of the world has caught up with a certain type of banker.

Marshall also believed that the value of currency could be maintained by varying the metallic

---

1 Remedies for Fluctuations of General Prices in "Contemporary Review", March, 1887, pp. 355-375; Alfred Marshall cited in <u>Stable Money</u>, Irving Fisher, p. 37.

content of the standard. He also suggested, as early as 1887, the purchase and sale of securities by central banks as a means of increasing and decreasing the volume of circulation. The American Federal Reserve Banks stumbled blindly upon the practical usefulness of this device in the early 1920's.[1]

Varying Weight of Gold Pound -- Williams, 1892

During the last quarter of the nineteenth century various plans and suggestions were advanced to prevent oscillations in the purchasing power of money. In 1892 Aneurin Williams, a member of Parliament, proposed a paper currency convertible into a varying amount of gold so that the currency would buy an invariable amount of commodities. He proposed to have the index checked every night and his plan provided for continuous Government redemption of notes. The price of gold bullion would however change constantly with the rise and fall of prices.[2]

---

1 Remedies for Fluctuations in General Prices in "Contemporary Review", March, 1887, pp. 355-375; Alfred Marshall cited in Stable Money, Irving Fisher, p. 37.

2 Cited in Stable Money, Irving Fisher, p. 41.

Manipulation of Discount Rate --
Wicksell, 1900

Near the turn of the century the great Swedish economist, Dr. Knut Wicksell, proposed the manipulation of the discount rate as a device to help maintain a stable price level. This proposal has met little opposition in theory. Wicksell also pointed out that stability of domestic prices is far more important than stabilization of foreign exchange. This latter proposal has met much opposition, particularly in countries doing a relatively large foreign trade. It took Swedish economists forty years to learn the lesson that Wicksell taught, but today the financial stability of Sweden is a marvel in an otherwise chaotic financial world.

Velocity of Circulation -- Gesell, 1900

Another original contribution to stable money theory came about this same time from a German business man named Silvio Gesell. He held that hot only the quantity of money but its velocity of circulation should be controlled. Gesell further claimed that, since goods spoil and must be offered for sale, money should be made to deteriorate also. For a practical device to accomplish this he recommended a tax on money of five per cent per annum. This tax

plan has not made much headway either in theory or in practice, although the social credit plan of Major Douglas and a somewhat similar scheme by E. S. Holter both provide for such taxes to speed up the velocity of circulation. The ramifications of the tax part of these plans would seem to be a little too complicated for practical consideration.[1]

Silver Controversy

The silver controversy, which broke out during the latter part of the century was basically an attempt to stabilize prices, which had been falling since the Civil War. According to an index number of wholesale prices prepared by Warren, Pearson and Stokes, prices fell from a high of 223 in January 1865, to a low of 66 in June 1896, representing a total deflation of over seventy per cent.[2] Free-silver advocates realized that the long period of depression and falling prices were caused by a rise in the value of gold. It was clear to them that no single standard can perform perfectly the function of a standard for deferred payments. They pointed out that two commodities, gold and silver, rarely

---

1 Stable Money, Irving Fisher, p. 43.
2 Warren, G. F., Pearson, F. A., and Stoker, H. M. Wholesale Prices for 213 Years, 1720 to 1932, Cornell University Agricultural Experiment Station Memoir 142, p. 6, November 1932. Warren, G. F., and Pearson, F. A., Wholesale Prices in the United States for 135 Years, Farm Economics, No. 72, pp. 1586-7, September 1931.

rise or fall in value at the same time and that therefore a bimetallic standard would prevent the more violent fluctuations. This movement came to a head in the William Jennings Bryan campaign of 1896 and would not have ended then but for the fortuitous discoveries of huge gold deposits in South Africa and in the Klondike and Alaskan mines. The Cyanide process which was perfected at that time made it profitable to produce gold from lower grade ores. The total annual production of gold quadrupled.[1] The resulting effect was a change in the secular trend of prices which continued until the World War.

An uninformed public was deceived by gold advocates into the belief that revival was due to confidence incident to the settlement of the silver question. However wrong Bryan may have been in advocating silver he was fundamentally right in his advocacy of stable money. At Madison Square Garden in 1896, he said:

> "What is the test of honest money? It must certainly be found in the purchasing power of the dollar. An absolutely honest money would not vary in its purchasing power;

---

1 Gold Production and Prices before and after the War, Indiana University Studies, Vol. XI, March, 1928. Lionel D. Edie cited in Stable Money, Irving Fisher, p. 57.

> it would be absolutely stable, when measured by average prices. A dollar which increases in purchasing power is just as dishonest as a dollar which decreases in purchasing power.[1]

High Cost of Living, 1896 to 1913

Looking back from the years preceding the World War the public realized that something had gone wrong. Everyone was talking about the high cost of living. The secular trend had been rising for sixteen years and the man in the street was again the victim. Again the villain was gold. From July, 1897, to April, 1910, the price level had risen forty-three per cent.[2] Times were better on the whole, although wages lagged. Bondholders felt the pinch as did others with fixed incomes. Interest in the subject during the period from 1906-10 is reflected in the fact that the number of publications on the high cost of living increased from thirty-five to one hundred twenty-one.[3] Furthermore, it was a world problem. The increased supply of world gold was the underlying cause. When will the world learn that the ever present uncertainty in the future value of gold should prevent conservative people from using such a substance as a monetary standard! As D. H. Robertson writes:

---

1 Quoted in Stable Money, Irving Fisher, p. 54.
2 Gold and Prices, Warren and Pearson, p. 14.
3 Stable Money, Irving Fisher, p. 58.

> "It is difficult to regard as very stable or sacred a standard of value which is liable to be upset by the discovery of new mines or processes of mining, by a decision on the part of some State to achieve the gold standard or of some other State to abandon it, by a sloughing off of the hereditary taboos of the Indian ryot or the London banker. The value of the yellow metal, originally chosen as money because it tickled the fancy of savages, is clearly a chancy and irrelevant thing on which to base the value of our money and the stability of our industrial system."[1]

1 Money, D. H. Robertson, p. 144; quoted in The Story of Money, Norman Angell, p. 365.

CHAPTER IV
UNSTABLE GOLD

Traditional Gold Standard -- Managed

On January 31, 1934, Professor R. M. MacIver, submitted the report of the Columbia University Commission on "Economic Reconstruction" to President Butler. The report very definitely recommended a "managed currency". It says:

> "The choice before us, under existing conditions, does not lie between an automatic regulator of money and a managed currency, with or without a gold basis. We cannot, even if we would, avoid the necessity of control. The only choice concerns the form of control we adopt and the objective we deem most essential for the determination of its policy."[1]

The traditional nineteenth century gold standard was in a very real sense a managed standard. The issue of bank notes was not only subject to laws, but was also controlled by the banks. The raising and lowering of the bank rate was under the strict direction of the Bank of England. The need for keeping the exchange rates stable certainly called for supervision. The fixing of reserve ratios was in itself a matter of management, as

---

1 Columbia University Commission, Economic Reconstruction, p. 38; quoted in Stable Money, Irving Fisher, p. 71.

also was the suspension of the Bank Act. Since the development of deposit currency there has been no approach to what could be called an automatic gold standard.

Alleged Advantages of Gold

Gold is an ideal international medium of exchange. In spite of the fact that nearly every leading country has dropped the traditional gold standard, this metal is still the most universally acceptable commodity. There is still unlimited willingness to accept it everywhere. More than that, while private hoarding has apparently decreased, governments are conserving their gold supplies in a manner which amounts to government hoarding. Gold has certain intrinsic qualities which make it most suitable for the settlement of international balances. Nations having a relatively large international trade realize that the problems of international trade and finance call for an international standard that is the same for all of the principal countries.

There were other advantages claimed for the pre-war gold standard, by its advocates. Currency is exchangeable in a fixed weight of gold. Furthermore, any two currencies that are on a gold standard may be quoted in terms of each other. If one monetary unit

contains 4.86 times more gold than another, calculations can be easily made and the par of exchange established. Since the material behind the money is itself an article of commerce which can be shipped abroad, it is merely necessary to calculate the relative weights of the various currencies to determine their relative values.

Advocates of a gold standard have always held that one basic reason for such a standard is to protect society from excessive changes in the supply of the media of exchange. The world's stock of gold has been accumulating for centuries. It is not physically possible to increase that supply by any large percentage in a short space of time. Furthermore, the supply does not shrink in physical volume. There is therefore a stability in the total quantity of world gold. For a very long period prior to the present decade the production of gold fluctuated between two and four per cent of the accumulated stock of gold. Gustav Cassel and Joseph Kitchin made independent studies of the year to year gold production and came to substantially the same conclusion:

> "An annual production of three per cent of the supply at any time is a

> condition for the maintenance of the general price level unchanged, so far as the gold supply is concerned."[1]

Equalization of Trade Balance

Another alleged advantage of the gold standard is suggested by Mr. Gladstone's statement that, "The great object of care and attention is the maintaining or restoring of its (the Bank of England's) reserve."[2] The practical application of this point of view was the keeping of the exchange rates within the gold points. The supposed advantage that was to flow from this very great solicitude for stable exchange rates was international equilibrium of price levels throughout the world, particularly of goods which enter international trade. Among gold standard countries, gold tends to flow to the country having the lowest price level. For example, if prices were falling in the United States it would be cheaper to buy in our markets. This would increase the demand for dollar exchange, and gold would therefore flow in. In time, the increasing quantities of gold would have an inflationary effect on our price level, and the shipments of gold to our banks would stop.

---

1 The Theory of Social Economy, 1923, Gustav Cassel, p. 451.

2 Quoted in The Banks and Prosperity, Lionel D. Edie, p. 22.

Meanwhile, in the countries having the higher price levels an opposite movement would be taking place. In the case of the latter gold flowing out would have a deflationary effect. Thus, there was a constant tendency for prices to be equalized throughout the gold-standard world. Opinions differ as to the great desirability of a device that periodically creates a deflation. However, gold standard advocates, unblushingly and rather proudly, claim this deflationary effect as an advantage.

Among nations on the gold standard, any deviation from the par of exchange indicated that trade relations were out of balance. The gold standard tended to maintain a balance of trade in the sense of equality, in the balance of payment. This does not mean that the visible exports and imports were equal. It does mean that the gold standard had an equalizing effect on the debits and credits of foreign trade, which debits and credits would include invisible as well as visible items. This was a very real advantage, and one would be disinclined to quarrel with British financiers for helping along this tendency. It did not work as automatically as some writers think. In England and other countries, whenever the exchange rate indicated a growing excess of imports, the bank rate was raised. This

Meanwhile, in the countries having the higher price levels an opposite movement would be taking place. In the case of the latter gold flowing out would have a deflationary effect. Thus, there was a constant tendency for prices to be equalized throughout the gold-standard world. Opinions differ as to the great desirability of a device that periodically enacts a deflation. However, gold standard advocates, unblushingly and rather proudly, claim this deflationary effect as an advantage.

Among nations on the gold standard, any deviation from the par of exchange indicated that trade relations were out of balance. The gold standard tended to maintain a balance of trade in the sense of equality, in the balance of payment. This does not mean that the visible exports and imports were equal. It does mean that the gold standard had an equalizing effect on the debits and credits of foreign trade, which debits and credits would include invisible as well as visible items. This was a very real advantage, and one would be disinclined to quarrel with British financiers for helping along this tendency. It did not work as automatically as some writers think. In England and other countries, whenever the exchange rate indicated a growing excess of imports, the bank rate was raised. This

raise had a deflationary effect and reduced the tendency to import, encouraged exports, and re-established the equality of trade. This was good management.

Briton's Advantage in Sudden Withdrawals of Gold from Foreign Countries

Another very great advantage from the point of view of the leading gold standard country, Great Britain, was that large sums of gold could be withdrawn suddenly from the financial markets of any country in the world. This was a tremendous advantage to the empire. It made British power and prestige practically supreme in both the political and economic world. This particular advantage to Great Britain was not inherent in the gold standard as she discovered after the World War. England's power in this respect depended upon the billions of credits and investments that she had abroad. England had sponsored the gold standard for over a century. English imperialism and her world-wide trade benefited by its acceptance by leading countries. Any attempt to raise strange gods in the monetary world met with stern treatment from British financiers. The fact that deflation was caused by the quiet withdrawal of gold made this weapon very formidable indeed. In all

sincerity we must admire the British for this astuteness; for all is fair in love and war -- including trade war. Although we may have been on the losing end, we can still admire the cleverness of British financial statesmanship. Her financiers have won many a battle without using the fleet.

It is interesting to note how tenaciously and sincerely conservative British financiers adhere to traditional opinions in regard to the gold standard. Governor Montagu Norman, testifying before the Macmillan Committee in 1929, said: "The main consideration in connection with movements of the Bank Rate is the international consideration."[1] Commenting upon this statement Lionel D. Edie declares: "This philosophy has meant in practice a tendency to make a fetish of the exchange rate as something to be defended at all costs, even at the cost of a deflationary collapse of the domestic economy."[2]

Inelasticity of Gold

Conservative and radical theorists alike agree that if money is to be stable in value it must have the quality of elasticity. By "elasticity" they

---

1. Quoted in Dollars, Lionel D. Edie, p. 80.
2. Ibid.

mean that the money -- gold, paper, credit, or whatever they chose to use for money -- must rise and fall in quantity with the needs of trade. This means that it must not only adapt itself to seasonal and incidental changes in the volume of business, but also that it should provide an adequate medium of exchange during the various periods of the business cycle and a quantity commensurate with the normal growth of industry over longer periods of time. It seems a little too much to expect that a currency will adjust itself to the requirements of a war period. It is a purely theoretical question, but very pertinent to consider if gold alone would be sufficiently elastic as a money to meet the above requirements. Obviously, if judged by this test, it would be impossible to find a poorer kind of money. Because of the very nature of its production, gold could not respond in quantity to the needs of seasonal, cyclical, or unusual requirements. Furthermore, gold has been responsible for troublesome long-term or secular trends of commodity prices during the past century. Of course, gold, like any other currency, breaks down when war is declared.

Various kinds of paper currency and credit have been used to supplement gold in an effort to

overcome the difficulties arising from the inelasticity of this metal. While the term "managed currency" may seem new, management of these supplementary currencies is not new. One of the chief problems of monetary science has been to provide a currency of sufficient elasticity, and at the same time to prevent that elasticity from creating the very instability that it was designed to prevent. If the supply of a currency does not adjust itself readily to changing demands for money, whether from monetary or non-monetary causes, to that extent it falls short of ideal elasticity. Efforts to devise media of exchange that would have an automatic elasticity of supply have proved hopeless.

Passing of the Gold Standard

For a standard that had so many powerful friends and so many advantages it is indeed remarkable that so many nations abandoned it. However, it is probably true that it was not abandoned as a matter of financial foresight. England, producing 80% of the world's gold and primarily interested in maintaining the gold standard, was forced off that standard twice since the war. Like England, other countries did not merely abandon the gold standard as a matter of party

overcome the difficulties arising from the inelasticity of this metal. While the term "managed currency" may seem new, management of these supplementary currencies is not new. One of the chief problems of monetary science has been to provide a currency of sufficient elasticity, and at the same time to prevent that elasticity from creating the very instability that it was designed to prevent. If the supply of a currency does not adjust itself readily to changing demands for money, whether from monetary or non-monetary causes, to that extent it falls short of ideal elasticity. Efforts to devise media of exchange that would have an automatic elasticity of supply have proved hopeless.

Passing of the Gold Standard

For a standard that had so many powerful friends and so many advantages it is indeed remarkable that so many nations abandoned it. However, it is probably true that it was not abandoned as a matter of financial foresight. England, producing 60% of the world's gold and primarily interested in maintaining the gold standard, was forced off that standard twice since the war. Like England, other countries did not merely abandon the gold standard as a matter of party

politics or political expediency. They abandoned it because they were forced to. The old gold standard simply did not work. And as things stand now, "All the king's horses and all the king's men can't put humpty-dumpty together again." In the future the burden of proof will certainly rest on those who advocate going back to a standard that appears to have been a fair-weather standard.

Insolvency of Gold Standard

The fundamental insolvency of the gold standard and the great central banks that controlled it is seen in the fact that even with the guarantee of their governments, they could not meet their obligations in gold. These were contractual obligations and when the banks could not meet them they were relieved of the responsibility by a kindly government. Scores of reasons can be found as to why a supposedly good standard did not work. Whatever conditions of a non-monetary nature are advanced as the reason, the fact still remains that it did not stand up under the conditions that prevailed. It may be claimed that governments and banking institutions did not live up to the rules of the game. No doubt such is the case, but realistic, economic systems must take into consideration the human element.

Lionel D. Edie, an authority "prejudiced in favor of the gold standard,"[1] advanced the following hypothesis in 1931: "What is transpiring under the surface of things is nothing less than the passing of the gold standard."[2] Ricardo pointed out that his country had "drifted" onto the gold standard. In other respects the gold standard appears to be an historical accident. In the United States it was not eloquence that saved the gold standard. It was the discovery of the Rand mines and the Klondike. One might say that Cecil Rhodes beat Bryan and elected William McKinley president of the United States. The upward secular trend of prices after 1896 insured the survival of the gold standard during fair financial weather until the World War. So, it need not surprise us that unseen forces have started the drift in another direction. Edie feels that something has happened to the gold standard which has nullified and destroyed its fundamental supply-function.

<u>Federal Reserve Responsibility for Passing of Gold</u>

The Federal Reserve Act was probably the most radical piece of banking legislation of modern

---

1. <u>The Banks and Prosperity</u>, Lionel D. Edie, p. 156.
2. <u>Ibid</u>. 157.

Lionel D. Edie, an authority "prejudiced in favor of the gold standard,"[1] advanced the following hypothesis in 1931: "What is transpiring under the surface of things is nothing less than the passing of the gold standard."[2] Ricardo pointed out that his country had "drifted" onto the gold standard. In other respects the gold standard appears to be an historical accident. In the United States it was not eloquence that saved the gold standard. It was the discovery of the Rand mines and the Klondike. One might say that Cecil Rhodes beat Bryan and elected William McKinley president of the United States. The upward secular trend of prices after 1896 insured the survival of the gold standard during fair financial weather until the World War. So, it need not surprise us that unseen forces have started the drift in another direction. Edie feels that something has happened to the gold standard which has nullified and destroyed its fundamental supply-function.

<u>Federal Reserve Responsibility for Fasting of Gold</u>

The Federal Reserve Act was probably the most radical piece of banking legislation of modern

---

1. The Banks and Prosperity, Lionel D. Edie, p. 156.
2. Ibid. 157.

times. Whether it was the intention of the framers of the act or not, it did permit central bankers to usurp to themselves certain responsibilities of far-reaching importance. Up to that time there was, due to the working of the gold standard, still considerable limitation upon the expansion and contraction of credit. The direct link between gold and credit was cut. Various devices were invented to insure what was called "automatic elasticity of credit." Credit was certainly elastic, but it was not automatic. Its elasticity was subject to the discretion of the Federal Reserve authorities, subject to any philosophy of inflation, deflation, or stabilization that the particular parties in power might subscribe to at any particular time.

Gold "Sterilized"

Senator Carter Glass and the late H. Parker Willis, the sponsors of this really radical legislation, were the most outspoken defenders of the gold standard! They were the High Priests of the Inner Shrine. Both professed faith in the mystical powers of gold. Yet with the exception of a brief period in 1920 the management of our credit and currency might just as well have been independent of gold. Gold, for all practical purposes, had been sterilized. English bankers looked on with mixed

feelings of admiration and alarm. Foreign bankers know what they mean by "gold standard," and it is doubtful that very many of them thought a 3.5% gold reserve adequate to restrict anything. The ratio of reserves to deposits established by congress on June 21, 1917, was as follows:

	Demand Deposits	Time Deposits
Central Reserve city banks	13%	3%
Reserve city banks	10%	3%
Country banks	7%	3%

Administrative Control of Credit

Every Federal Reserve Bank was required to maintain reserves in gold of not less than 35% -- 10% x 35% = 3.5%. Thus the Federal Reserve System was permitted to expand credit on a gold base of 3.5%. Furthermore, various devices were created which were to make possible what was called "secondary expansion." The Federal Reserve Banks were provided with rediscount facilities and the power to buy and sell securities in the open market. They were authorized to allow reserve to fall below the legal requirement subject to a tax graduated in amount, to revise the reserve requirements of the country at large, or to suspend any and all reserve requirements completely.[1] The Federal Reserve

1. The Theory and Practice of Central Banking, H. Parker Willis, p. 272.

Banks were thus in a position to inflate or deflate reserve balances at will. Since "secondary expansion" was made independent of the gold base, the system was thus made tremendously "elastic" and those in control could turn on inflation and deflation at will. They could, and did, restrict credit when badly needed by business and they could pump huge quantities of credit into the system in an attempt to reverse the waning demands of business that they themselves had discouraged.

Federal Reserve Notes Unimportant Relatively

Provisions were also made for elasticity of note issue, and from the early discussions of the Federal Reserve Act it is clear that much was expected of the new notes. It was note elasticity and not credit elasticity that was expected to accommodate the seasonal needs of business and restore confidence when panic threatened. The view was widely held that this note elasticity would effectively end money panics. There was some criticism. The law made Federal Reserve Notes (which are in reality the promissory notes of private banks) the obligations of the United States Government. Bryan objected to this. Others, like Charles A. Lindbergh, Sr., thought that it was unjust. "No one with an ounce of brains, unless

filled with injustice, or a mere hireling, will defend such a practice," he wrote.[1] These criticisms were directed at the form of the note rather than at its "elasticity."

H. Parker Willis says: "Note issues under the Reserve System have shown comparatively little indication of the "elasticity" of which so much has been said, and which constitutes a genuine mark of success in the management of a credit currency."[2] The reason for this is doubtless the unexpected growth of the use of "deposit currency." The note issue is expansible and flexible, but the credit system under the Federal Reserve Act is more so.

Elasticity of "Deposit Currency" an Elasticity of Policy

The "elasticity" of the Federal Reserve System is an "elasticity" of policy. The flexibility of the system permitted the widest kind of management. While the experience with note currency under the Federal Reserve System has proved disappointing to the sponsors of the Act, other provisions proved, from their point of view, to be even more satisfactory than they had dreamed. The whole system of checks and

---

1. Why Is Your Country at War, Charles A. Lindbergh, Sr. p. 61.
2. The Theory and Practice of Central Banking, H. Parker Willis, p. 262.

deposits as it has grown in the United States is a modern, streamlined variety of "wild cat" banking. There is really no fundamental difference between "wild cat" note issue and "wild cat" creation of "deposit currency." How well the system was managed may be seen in the fact that there resulted the most unstable peace-time price level of a whole century. The total volume of credit and currency was expanded or contracted to suit the whims of powerful monetary authorities or those who had influence with these authorities. The theoretically ideal elasticity of the media of exchange that is supposed to parallel exactly the needs of business did not work out under such management. How well the needs of business were met is reflected in a 40% deflation of the price level that took place between 1929 and 1932. There are those who believe that the discouraging fall in the price level reduced the demand for credit steadily, and that this steadily decreasing demand for credit caused still further contraction of business. Does this view hold that the monetary authorities could do nothing to stay the deflation? Are we to suppose that they knew of no anti-deflationary measures that would stop the progressive drop in the volume of credit? The only tenable view is that the great deflation of 1929-1932 was a planned deflation.

In any case, as Professor Edie points out, "The historical events of the decade 1920-1930 demonstrated that the automatic elasticity, so called, was in fact a scheme of automatic explosibility. In 1920, in the name of elasticity the Federal Reserve allowed rediscounts to run up to the tremendous sum of $2,780,000,000. In the snap-back it pruned them down to $396,000,000. In 1929-1931 the range was from $1,096,000,000 at the peak of the stretching process to $149,000,000 at the end of the snap-back."[1]

The so-called "banker standard" has doubtless had a great deal to do with the passing of the gold standard and the evolution toward some form of managed objective standard. While the result was at times chaotic, due to mismanagement, or due to improper control, nevertheless certain devices did work far beyond the expectation of the sponsors. Bankers began to realize that if demand deposits could be expanded on a gold base of not more than 3.5%, and time deposits on a base of not more than 1%, they might also expand on less. There is apparently no limit to this sort of expansion short of zero -- so far as domestic currencies are concerned. It is probable that the gold standard cannot endure in a world where bankers have become convinced that reserve bank credits are

---

1. The Banks and Prosperity, Lionel D. Edie, p. 168.

adequate reserves for credit expansion. Sponsors of the Federal Reserve System, friends of gold, have accomplished what the foes of gold failed to do.

The Dominant Dollar

Reginald McKenna, formerly Chanceller of the British Exchequer, and afterwards Chairman of the Midland Bank, is one of many foreign financiers who believe that the price level in the United States is determined by the deliberate policy of the Federal Reserve Board. He pointed out in 1925 that this control was, in a sense, world wide. He held that "it is not the value of gold in America which determines the value of the dollar, but the value of the dollar which determines the value of gold." He explained the external influence of the Federal Reserve authorities in this way:

> "The mechanism by which the dollar governs the external value of gold is obvious. If the price level outside America should rise in consequence of an increase in the supply of gold, America would absorb the surplus gold; if, on the other hand, the external price level should fall in consequence of a shortage of gold, America would supply the deficiency. The movement of gold would continue until the price levels inside and outside America were brought once more into equilibrium. Although gold is still the nominal basis of most currencies, the real determinant of movements in the general world level of prices is thus the purchasing

> power of the dollar. The conclusion therefore is forced upon us that in a very real sense the world is on a dollar standard."[1]

It is futile to try to explain the excessive credit and price gyrations of the past fifteen or twenty years by claiming that they resulted from the World War. The flexible system that was set up in the United States under the Federal Reserve Act has so completely sterilized gold that the United States was nearly independent of the world influences so far as the expansion and contraction of American credit was concerned. The breakdown of credit and price levels abroad, even as late as 1930 and 1931, may, with justification, be traced to the World War. However, the contraction of American domestic credit was probably a major factor contributing to European woes. Actually, then, the breakdown of American credit caused the breakdown abroad rather than the commonly held belief that the breakdown abroad caused the contraction of American credit. American credit was supposed to be controlled at home. Well known devices for the expansion and contraction of reserve bank credit were controlled, and completely controlled, by Federal Reserve Bank authorities. Gold could be hoarded in American banks without having any

---

1. Monetary Stability, Mr. Reginald P. McKenna, p. 157. Quoted in The Story of Money, Norman Angell, p. 375.

effect whatever on the volume of reserve bank credit, and reserve bank credit was the real base of American expansion of credit. Commenting on the "sterilization" of American gold, Professor Cassel, in his Rhodes Memorial Lectures, said:

> "According to the classical doctrine of the automatic functioning of the Gold Standard, such a rise of prices would have been the immediate effect of the inflow of gold, and this effect would have checked the inflow and eventually caused a reversal of the movement. However, both in France and the United States there was an aversion from using the fresh gold acquired for any such purpose, and to a large extent the gold was simply buried in the vaults of the Central Banks. As a consequence of a restrictive credit policy the price-levels of these countries were not only prevented from rising, but actually lowered, in spite of the continued inflow of gold ...... Had the gold been used in a normal way prices in France and the United States would have risen above the price-level of the outside world. This would have led to an export of gold which would have saved the outside world from a further fall in prices and helped it to maintain the Gold Standard. Thus it may truly be said that the breakdown of the Gold Standard was the result of a flagrant mismanagement of this monetary mechanism."[1]

Increased Efficiency of Gold

Mr. H. F. Fraser, who advocates a return to the traditional gold standard, denies that America "sterilized" her gold and advances the following opinion:

---

1. The Crisis of the World's Monetary System, Gustav Cassel, P. 70-71.

> "Great Britain was forced off the gold standard by the rigidity of her internal economic structure. The external difficulties were but warning symptoms of the real underlying cause, lack of internal adjustment. The Bank and the Government could not save the gold standard because they were not prepared to force such adjustment."

In support of his denial that America "sterilized" her gold, Fraser pointed out that the Federal Reserve System which was established in 1914 effected a great economy in the use of gold by centralizing, for the most part, our American gold reserves, with the result that while our gold reserves in the period from 1914 to 1929 increased by about $2,500,000,000, the loans and deposits of our banks increased by the stupendous sum of $35,000,000,000. At the end of this period our American gold reserves were less than seven per cent of our bank credit. According to Professor J. H. Williams, we have made a more intensive utilization of gold than any other country except England.[1] Professor Edie has shown that there has been a progressive economy in American gold from 1882 to 1925, when England went back on the gold standard:

---

1. Gold and Monetary Stabilization, Professor J. H. Williams, p. 149, quoted in Great Britain and the Gold Standard, H. F. Fraser, p. 72.

TABLE II

Stock of Gold in the United States
Expressed as a Per Cent of Individual Deposits
of all Banks Plus Stock of currency
(1882-1925) a

Year	Per Cent
1882	12.1
1913	9.8
1925	8.6

a. Money, Bank Credit and Prices, Lionel D. Edie, p. 264

If "sterilization" merely means "economy in the use of gold," then Fraser is right. However, "sterilization" meant more than that. It meant that the upper and lower limits of credit expansion and contraction were determined, not by gold, but by certain administrative devices of the Federal Reserve Banks.

Deflation Necessary to the Gold Standard

Flexibility in the economic structure is a necessity for the proper working of the gold standard. This is true both internally and externally. Price levels can rise and fall with the loss or gain of gold stock if there are no restrictive contractual

agreements which prevent cost adjustments. Fraser believes that there must be periodical deflations in a system having the kind of gold standard which he advocates. Deflation in any country under such a system is considered desirable if prices are above those of other countries that are on the gold standard. That is one of the cardinal principles of the traditional gold standard.

<u>Inflexible Wages and Competitive Prices</u>

However, wages are also prices and, as such, should come down with other prices. Britons who love the gold standard should direct their enthusiasm to the education of labor in this matter of a lower wage scale. Similar adjustments would have to be made in other important countries and, without the help of a dictator, reduction of wage scales today is a hopeless task in every important nation. The prices of commodities that are sold on free competitive markets would respond immediately to an outflow of gold, and would come down. If the price of labor that goes into those commodities did not also respond immediately, there would be unemployment, as producers could not continue to produce under conditions of falling prices and fixed costs. If a laborer happens to be producing

a product directly for the market, he tends to continue production when the price of his product falls. There is therefore no unemployment in his case, but he does accept a lower money wage. If prices of other products go down also, he is no worse off as his real wages have not changed. There is therefore no depression for him. However, if a producer is dependent upon hired labor that will not accept lower wages when prices are falling, his laborers are in reality receiving a higher real wage than they deserve and the producer will have to curtail production. Between 1924 and 1931, when England was forced off the gold standard, nominal wages had fallen only 2½%, while wholesale prices had fallen 40%. Unemployment as a result rose steadily during the period.

a product directly for the market, he tends to continue production when the price of his product falls. There is therefore no unemployment in his case, but he does accept a lower money wage. If prices of other products go down also, he is no worse off as his real wages have not changed. There is therefore no depression for him. However, if a producer is dependent upon hired labor that will not accept lower wages when prices are falling, his laborers are in reality receiving a higher real wage than they deserve and the producer will have to curtail production. Between 1924 and 1931, when England was forced off the gold standard, nominal wages had fallen only 2½%, while wholesale prices had fallen 40%. Unemployment as a result rose steadily during the period.

T A B L E (a)

Wages, Other Prices, and Unemployment in England, 1924 to 1931

Year	Nominal Wages (Prof. Bawley)	Cost of Living Minister of Labour	Real Wages	Wholesale Prices Board of Trade	Unemployment (Minister of Labour) Percentage
1924	100.0	100.0	100.0	100.0	10.2
1925	101.4	100.6	100.8	95.7	11.0
1926	101.3	98.3	103.0	89.1	12.3
1927	101.5	96.0	105.7	85.2	9.6
1928	100.6	94.9	106.0	84.4	10.7
1929	100.1	93.7	106.8	82.1	10.3
1930	99.2	90.2	110.0	71.9	15.9
1931					
quarter					
1st	98.7	86.7	113.8	64.0	21.4
2nd	97.8	83.6	117.0	62.8	21.0
3rd	97.6	83.2	117.3	60.3	21.8

(a) Go Back to Gold, Dr. Benham, Appendix II; quoted in Great Britain and the Gold Standard, H. F. Fraser, p. 111.

Illusion of Stability

The price of gold is fixed by law over long periods of time. This fixing of a mint price gives an illusion of stability. Furthermore, the total stock of gold in the world cannot be increased very quickly. While this stock is always rising, the year to year increase in the total stock is not very great (about 3% on the average). The fact that the total stock of gold is increasing constantly has led to the erroneous belief that the gold supply is adequate and that low prices at various periods had not been caused by a gold shortage. The gold supply is, of course, not to be considered independent of the demand for gold. Various authorities, such as Kitchen, Cassel, Edie, Hooker, Keynes and Lehfeldt, have made studies of the relation between gold and the long-term trend of prices. Although various statistical methods were used, the results were substantially the same. Kitchen's conclusion is typical: "For more than 75 years before the war, if the world's stocks of monetary gold increased more rapidly than 3.1% per year, prices rose. If they increased less rapidly prices fell."[1] Studies were made in various parts of the world -- in the United States, France, Denmark, and

---

1. The Supply of Gold Compared with the Prices of Commodities, Interim Report of the Gold Delegation of the Financial Committee of the League of Nations, Document C 375, M. 161. Quoted in Gold and Prices, Warren and Pearson, p. 94

Illusion of Stability

The price of gold is fixed by law over long periods of time. This fixing of a mint price gives an illusion of stability. Furthermore, the total stock of gold in the world cannot be increased very quickly. While this stock is always rising, the year to year increase in the total stock is not very great (about 3% on the average). The fact that the total stock of gold is increasing constantly has led to the erroneous belief that the gold supply is adequate and that low prices at various periods had not been caused by a gold shortage. The gold supply is, of course, not to be considered independent of the demand for gold. Various authorities, such as Kitchen, Cassel, Edie, Hooker, Keynes and Lehfeldt, have made studies of the relation between gold and the long-term trend of prices. Although various statistical methods were used, the results were substantially the same. Kitchen's conclusion is typical: "For more than 75 years before the war, if the world's stocks of monetary gold increased more rapidly than 3.1% per year, prices rose. If they increased less rapidly prices fell."[1] Studies were made in various parts of the world -- in the United States, France, Denmark, and

---

1. The Supply of Gold Compared with the Prices of Commodities, Interim Report of the Gold Delegation of the Financial Committee of the League of Nations, Document C 375, M. 161. Quoted in Gold and Prices, Warren and Pearson, p. 84

Germany -- and different commodities were included in the indexes, but in all cases the conclusion was the same. The reason that the quantity of gold had to increase to sustain the price level is that there has been a year to year increase in the physical volume of production.

At no time during the history of the gold standard has the secular trend remained stable. After the gold discoveries of 1848, the year to year trend was up until after the Civil War. Beginning in January 1865, the long-term trend continued downward until reversed again by the gold discoveries made in the last decades of the century. The low point was reached in June, 1896. Thereafter, under the stimulus of the great quantities of new gold, prices throughout the world rose. One of the foremost problems of the period immediately before the World War was the high cost of living in 1913. After the war inflation, and following the high peak of prices made in May 1920, the year to year trend turned down, and all countries, except those that were not on a gold standard, experienced the most cruel deflation of modern times. In the United States, the low point was reached in February 1933. Prices, in terms of gold, continued to fall, but

prices in terms of dollars rose. The deflation ended in some countries in 1931 when inconvertible currencies were adopted. The statement that the wide price changes that occurred since the war were world-wide must be qualified somewhat. China did not experience either the doubling of prices around 1920 or the great collapse that followed. Not until 1931 did prices begin to fall there. The decline at that time was due to the large withdrawals of silver.

Gold an Unstable Peace-Time Standard

The most important characteristic of any currency is stability of value. In this respect gold has failed miserably in comparison with other standards. Gold has been given every advantage. It is always a question of returning to gold only when times of disturbance have passed. There is no standard that requires quite such ideal conditions. Yet, during fourteen years, from 1920 to 1933, fourteen years of peace, the value of gold rose 253%![1] The point of view of some friends of the gold standard is that peace-time stability is due to paper. The Columbia University Commission says: "It is an entirely fallacious notion that paper standards are uncontrollable. It is strange

1. Gold and Prices, Warren and Pearson, p. 89.

that such statements should still be made by monetary authorities in the light of experience with paper currencies in the past few years."[1] During the periods when England has been off gold, from 1797 to 1821, from 1914 to 1925, and again since 1931, there were no inflationary excesses.

After the gyrations of the past two decades business men should be completely disillusioned as to the stability of the gold standard. George F. Warren, Professor of Agricultural Economics and Frank A. Pearson, Professor of Prices and Statistics, both of Cornell University, made elaborate studies of the value of gold in England for 152 years, showing the comparative amounts of other commodities that could be bought with an ounce of gold. They found that, in 1934, gold had reached the highest value it had attained during 150 years. Its value was even greater than in 1896. From 1914 to 1934, the fluctuations were more violent than at any previous time in 150 years. Similar studies made by Warren and Pearson indicate that changes in the value of gold were about the same in the United States as in England. "Gold reached the highest value ever known in the United States in 1934. Other periods of

1. <u>Economic Reconstruction</u>, <u>Report of the Columbia University Commission</u>, p. 40. Quoted, p. 290

very high value were in 1843 and 1896. The lowest value ever known was in 1920. After 1929, the value of gold rose with great rapidity. In fourteen years the value of gold changed from the lowest to the highest level known in the history of the United States."[1]

Trade Restriction and Automatic Price Adjustments

There are other inflexible elements that would prevent adjustment in the price structure and a proper working of the gold standard: for example, set prices, controlled by monopolistic and quasi-monopolistic enterprise, encouraged by governments and defended by organized business. If prices are practically "pegged" by any such powerful group, other groups are injured whenever the general level of prices falls, as it must at times if the gold standard is to work as it is intended to.

There is another type of rigidity that has to do with trade restrictions. It is just plain honesty for a government to establish a sound equilibrium in its balance of payments. Furthermore, it is doubtful that any nation can avoid doing so in the long run. Mercantilist notions of "a favorable

---

1. Gold and Prices, Warren and Pearson, p. 86.

balance of trade" in practical affairs, rob the nations involved of the advantages of international division of labor. For example, if we erect a tariff wall against German toys, it will be only a matter of time before an adverse trade balance will compel Germany to stop importations from the United States. The illustration is a little oversimplified, but the principle is sound. Both countries lose. There are times when we should reduce our exports and increase our imports. It is the only rational thing to do. We are unwilling to abandon mercantilist doctrines in fact as well as in text books. However, if this were politically feasible at all, it would be done, with or without the gold standard and the point that must be stressed here is not the recognized stupidity of tariff policies -- our own in particular --, rather the futility of expecting that anything will be done about it. It is a strange fact that the great majority of Americans would fight "tooth and toenail" to prevent a balance of international payments. War debts and interest payments on the war debts are credits to us in the balance of payments. Any government responsible for an increase of imports which would make these payments possible would be retired at the next election. Ministries in other countries must

balance of trade" in practical affairs, but the mations involved of the advantages of international division of labor. For example, if we erect a tariff wall against German toys, it will be only a matter of time before an adverse trade balance will compel Germany to stop importations from the United States. The illustration is a little oversimplified, but the principle is sound. Both countries lose. There are times when we should reduce our exports and increase our imports. It is the only rational thing to do. We are unwilling to abandon mercantilist doctrines in fact as well as in text books. However, if this were politically feasible at all, it would be done, with or without the gold standard and the point that must be stressed here is not the accursed stupidity of tariff policies -- our own in particular --, rather the futility of expecting that anything will be done about it. It is a strange fact that the great majority of Americans would fight "tooth and toenail" to prevent a balance of international payments. War debts and interest payments on the war debts are credits to us in the balance of payments. Any government responsible for an increase of imports which would make these payments possible would be retired at the next election. Ministries in other countries must

accede to the protection demands of powerful pressure groups or they will be displaced by those who will.

The Return to Laissez-faire Difficult

The fundamental objective of the gold standard -- equalization of international balances -- is a just objective, and one that is highly desirable. Gold standard advocates apparently feel that we should do all of those things which will balance international trade and domestic social relations, and then let the gold standard automatically keep things in balance. Unfortunately, the rigidity that has crept into the world's economic structure is something that cannot be corrected merely because some economists think that the gold standard would work under conditions of laissez-faire. If we could do away with all wage agreements, repeal the tariff laws, and trade restrictions, quotas, and embargoes, do away with all monopolies, hang Hitler and Mussolini, and re-establish laissez-faire conditions in all foreign and domestic relations, the gold standard might work.

A 100% ideal system of laissez-faire has never been tried anywhere, and it has never been approached anywhere except in England. It is still

possible at a Rotary Club dinner and in some political circles in both the United States and England to get a cheer by denouncing the government for meddling, but in both countries it is beyond the bounds of practical politics to think of going back to any system moderately resembling laissez-faire. In England, Parliament has passed act after act regulating the relations between employers and employees, and tariffs have been imposed with little opposition.

Artificial Changes of the Secular Trend

Prices do get out of line with the secular trend for a variety of reasons that have to do with gold. For example, if a country goes off the gold standard the demand for gold is lessened. The fact that most of the countries of the world discontinued the gold standard during and after the war accounts for the fact that prices got out of line at that time. The quantities of gold that were released supported higher price levels in countries that remained on the standard. Another thing that has a very real effect on the secular trend is the practice of "sterilizing" gold. This device has already been discussed.[1] It is technically different from other methods of

---

1. See p. 65.

increasing the efficiency of gold and is more like an actual decrease in supply. Devaluation affects the secular trend in two ways: first, by the increase in the number of monetary units, such as dollars, pounds, etc.; secondly, by the increased quantity of gold produced under the stimulus of a higher mint price. Thus, a 40% increase in the price of gold not only increased the number of dollars by that percentage, but it also started production at what were previously sub-marginal mines. The year to year increase is greater in weight, and worth more in dollars. But what is much more important is that the world's stock of gold is increased by a percentage which is greater than the yearly average of 3%. In 1935 the increase of the world's total stock amounted to the phenominally high figure of 5%.[1] Since that time the expansive movement has continued and the end is not yet in sight. According to the Midland Bank Review the world's output of new gold in 1937 is estimated at a higher figure than ever, both in quantity and in value:

> In weight it showed a rise of more than five per cent as compared with 1936, and was two-thirds as large again as in 1930, before the break-up of the international monetary system then operating.[2]

---

1. Trends in Gold Production and Monetary Stocks, Walter B. Kahn, Foreign Affairs, July 1936, p.702.
2. Midland Bank Review, May-June 1938, p. 1.

increasing the efficiency of gold and is more like an actual decrease in supply. Devaluation affects the secular trend in two ways: first, by the increase in the number of monetary units, such as dollars, pounds, etc.; secondly, by the increased quantity of gold produced under the stimulus of a higher mint price. Thus, a 40% increase in the price of gold not only increased the number of dollars by that percentage, but it also started production at what were previously sub-marginal mines. The year to year increase is greater in weight, and worth more in dollars. But what is much more important is that the world's stock of gold is increased by a percentage which is greater than the yearly average of 3%. In 1935 the increase of the world's total stock amounted to the phenomenally high figure of 5%.[1] Since that time the expansive movement has continued and the end is not yet in sight. According to the Midland Bank Review the world's output of new gold in 1937 is estimated at a higher figure than ever, both in quantity and in value:

> In weight it showed a rise of more than five per cent as compared with 1936, and was two-thirds as large again as in 1930, before the break-up of the international monetary system then operating.[2]

---

1. Trends in Gold Production and Monetary Stocks, Walter B. Kahn, Foreign Affairs, July 1936, p.702.
2. Midland Bank Review, May-June 1938, p. 1.

Effect of Devaluation -- Warren and Pearson Cited

Professor Warren, who advised President Roosevelt in the matter of dollar devaluation, expected an immediate effect on the price level from an increased number of gold units. He wrote:

> "When a country changes the price of gold, the effect on prices of most basic commodities is practically instantaneous. In fact, the anticipation of a change in the price of gold may cause commodity prices to change in advance of the fact. An increase in the price of gold gradually affects all prices. It either relieves prices from declining or actually increases them."[1]

In magazine articles and elsewhere the claim was made that basic commodity prices actually did move approximately in proportion to the advance in the price of gold. The period used as proof of this contention was from February 1933 to August 1934. The price of gold was compared with the Journal of Commerce index of prices of thirty commodities. The Journal of Commerce index rose 67%. The price of gold rose 69%. While this writer is still skeptical, these figures show an amazing mathematical correspondence to say the least.[2]

---

1. Gold and Prices, Warren and Pearson, p. 191.
2. Ibid., p. 193.

Increasing Ratio of Credit per Dollar of Gold

The amount of credit for each dollar of gold has on the average increased steadily since 1880. Warren and Pearson estimate that bank deposits per dollar of gold have increased at the rate of 1.68% per year. This is the average rate of increase for a period of fifty-two years. During the period from 1880 there was a decrease in the use of monetary circulation which partially offset the increase in the use of credit. The net increase of both money and credit per dollar of gold was found by the same authorities to be 1.06% per year. Studies of the period since the establishment of the Federal Reserve System show that there is no indication that the system stimulated this increase. In fact the reverse is the case. From 1923 to 1927, the average amount of monetary circulation plus bank deposits per dollar of gold was $11.56, an amount which, when compared with pre-war periods, showed a less than average increase. Curiously the increase in the use of credit and the consequent increase in the efficiency of gold does not appear to have altered the increasing need for gold to support the price level. While the efficiency in the use of

gold has been increasing gradually other offsetting factors pertaining to the standard of living have also been increasing. It is a fact that it still takes an increase in world gold of about 3% per year to sustain the price level in spite of the increased efficiency of gold.[1]

Gold Seriously Deflationary

That there is a close connection between gold and the long-term drift of commodity prices is well established. Economists agree on this. The harm done by this long-term downward drift is incalculable. Not only does it have a deadly effect on business enterprise, but there is also great injustice resulting from the shift in values that seriously affects debtors and creditors. Furthermore, the persistent slide in prices in a period such as that from 1865 to 1896 has an important effect on the business cycle. During such a period the depression phase of the cycle lasts longer. Business is depressed nearly three quarters of the time. Depressions, like that of 1873 and of 1930, do not occur when the secular trend is not downward. Both of these depressions lasted about six years.

---

1. Gold and Prices, Warren and Pearson, p. 137.

Doubtless, business would run its course through revival, prosperity, crises, and depressions, if there were no secular trend. However, greater violence and liquidation would not occur if there were no underlying downward trend aggravating the cyclical decline.

Gold can and does cause deflation in three different ways that have been mentioned in this chapter: a developing shortage of world gold, an outflow of gold to another country, and an artificial shortage caused by "sterilization" or hoarding. In spite of these three major defects of the gold standard, three defects which no one disputes, there was insistence everywhere on the continent and in the British Isles, that governments return to gold after the war. This insistence was certainly based upon the illusion that gold would bring stability. The public believed that it would. Those who convinced the public of this knew that it wouldn't. For this reason a monetary controversy takes on all of the fervor of a religious war. As soon as a monetary economist, who happens also to be a public-spirited citizen, becomes aware of this gigantic and deliberate deception, he rises in wrath. He may be a very poor orator, in which case his wrath will not shake the

nation. However, if he happens to be a William Jennings Bryan, his impassioned oratory will be repeated for a generation.

CHAPTER V

ENGLAND ON AND OFF GOLD

England's Return to Gold in 1925

In January 1918, a committee was appointed by the English Government, headed by Lord Cunliffe, ".... to consider the various problems which will arise in connection with currency and the foreign exchanges during the period of reconstruction and report upon the steps required to bring about the restoration of normal conditions in due course."[1]

In an Interim Report, made in August 1918, the Committee recommended a return to the gold standard after the war, without delay:

> "In our opinion it is imperative that, after the war, the conditions necessary to the maintenance of an effective gold standard should be restored without delay. Unless the machinery which long experience has shown to be the only effective remedy for an adverse balance of trade and an undue growth of credit is once more brought into play, there will be grave danger of a progressive credit expansion which will result in a foreign drain of gold, menacing the convertibility of our note issue and so jeopardizing the international trade position of the country."[2]

Such was the recommendation of a group made up almost exclusively of the foremost English bankers.

---

1. Quoted from Stable Money, Irving Fisher, p. 277.
2. Ibid., p. 278.

From the subsequent dismal failure of the Cunliffe recommendations, in England's return to the gold standard one might conclude that these bankers had made a mistake. However, there are writers who explain the failure in another way. Mr. Kitsen feels that their advice was favorable to bankers, but not to British trade and world trade and industry. He said:

> "In no other business or profession -- save that of banking -- would the Government of any civilized country so brazenly offend the public sense of justice in that particular business, to determine the legal privileges which such a business should enjoy.
>
> "What would the public say if the Government of this country were to appoint a committee drawn exclusively from the Brewers of Whiskey Distillers Association to determine the character of our licensing laws; or a committee composed exclusively of criminals to determine the criminal laws?"[1]

Keynes' Uncanny Foresight

Mr. John Maynard Keynes is probably the most brilliant living economist. His prestige among monetary scientists has grown, not so much as a result of the towering scholarship of his treatises, but rather from the almost uncanny foresight and accuracy with which he warned England of the inevitable consequences of a return to the gold standard. He pleaded

---

1. The Bankers' Conspiracy, Arthur Kitsen, p. 38; Quoted in Stable Money, Irving Fisher, p. 279.

with dignity against such a return, but to no avail. On April 28, 1925, the fatal step was taken, a step more grave than a declaration of war: Mr. Churchill announced the return to gold. On May 13, the Gold Standard Act of 1925 was passed. Keynes had pointed out that the pound was overvalued externally by about 10%. He forecast deflation of prices, deflation of wages, deflation of profits, social disturbances, and an abnormally high degree of unemployment.[1] It is one thing to write learned books on the theory of banking. It is quite another to submit a "blueprint" of the future consequences of an important act. The world knows what happened. For the first time since the war started in 1914, the Bank considered the foreign rate in determining the rate of discount. The rate was raised to 5%. England got "sound money", but the rules of the game hurt. Foreign exchange requirements called for deflation at home. Exporters had to lower their prices. Foreign buyers were not so eager to buy expensive pounds. A higher rate of discount reduced the demand for credit as it was expected to do: a successful result from the point of view of the monetary authorities. Prices fell steadily for six years: another successful result. Labor could not be made to understand its part in the program. The

---

1. Great Britain and the Gold Standard, H. F. Fraser, p. 47.

rules of the game called for a reduction of money-wages. Labor's faith in the inherent stability of the gold standard may have been too great. Gold standard advocates had promised stability and labor certainly got it in the form of money wages that dropped only 2½% in six years. Meanwhile the wholesale price level dropped 40%.

> "Early in 1929 it became evident that there was difficulty in reconciling the national and international factors in monetary policy. Great Britain had returned to gold parity under conditions which necessitated a fall in domestic price levels. In fact, however, certain groups of prices and wages in Great Britain proved to be particularly rigid, so that, as commodity prices slowly declined in world markets, the export trade fell off and unemployment increased. ....unless interest rates kept low abroad there was always the possibility of a drain of gold depleting the comparatively small gold reserves of the Bank of England."[1]

<u>England's Gamble on Price Rise in America</u>

The monetary authorities had gambled on the prospect of a rise in American prices. However, at that time, American monetary authorities were following a policy of stabilization. From 1921 to 1929 the price level in the United States was not permitted to rise or fall very far before corrective

---

1. *Report of the League of Nations Gold Delegations*, p. 15.

action was taken through the "open market" operations and the discount rate. The English authorities were disappointed. Prices in the United States did not rise: in 1929 the price index was still at the 1922 level. If American and other prices had risen, the over-valuation of the pound would have been corrected. In other words, inflation abroad would have obviated the necessity of deflation at home for the British. Unfortunately for the speculations of British monetary authorities, we had our own deflationists in America. The average price level for 1925 according to the index of the United States Bureau of Labor Statistics was 151. It has never been that high since. Speculating on a further rise, British monetary experts picked the top of a bull market in American commodities as the time to return to gold. It proved to be a costly blunder, both from the point of view of the friends of the traditional gold standard and for the welfare of all England during the years from 1925 to 1931. However, this great blunder may have obviated the danger of England's return to the pre-war gold standard.

England Forced off Gold in 1931

If English monetary authorities had not been so hasty in returning to the gold standard, or if they

action was taken through the "open market" operations and the discount rate. The English authorities were disappointed. Prices in the United States did not rise: in 1929 the price index was still at the 1922 level. If American and other prices had risen, the over-valuation of the pound would have been corrected. In other words, inflation abroad would have obviated the necessity of deflation at home for the British. Unfortunately for the speculations of British monetary authorities, we had our own deflationists in America. The average price level for 1925 according to the index of the United States Bureau of Labor Statistics was 151. It has never been that high since. Speculating on a further rise, British monetary experts picked the top of a bull market in American commodities as the time to return to gold. It proved to be a costly blunder, both from the point of view of the friends of the traditional gold standard and for the welfare of all England during the years from 1925 to 1931. However, this great blunder may have obviated the danger of England's return to the pre-war gold standard.

England Forced off Gold in 1931

If English monetary authorities had not been so hasty in returning to the gold standard, or if they

had devalued the pound by the amount of its apparent over-valuation, the gold standard might have weathered the storm that broke in the early summer of 1931.[1] There had been serious financial difficulties developing on the continent. Unemployment was excessive in both Austria and Germany. As the industrial situation became worse, taxes fell, causing financial difficulties for both governments. The rise of Hitler and his radical proposals in regard to the cancellation of foreign debts added to the uncertainty. The world's balance of payments had been maintained by the renewal of short-term loans for a number of years preceding. A lack of confidence might at any time have resulted in large withdrawals of these short-term credits. There was over two billion dollars of American money in Germany alone.[2] American and British banks became nervous over the situation and a run began on Germany. To prevent default, Mr. Hoover declared a moratorium. This dramatic gesture restored confidence temporarily. Uncertainty increased because of France's delay in accepting the proposals. The runs on the German banks continued and spread to other countries. Exchanges were closed and conditions in general became chaotic in the various financial markets. A "standstill" arrangement was

---

1. Great Britain and the Gold Standard, H. F. Fraser, p. 105.
2. The Money Muddle, James P. Warburg, p. 59.

agreed to in London, under which some of Germany's creditors agreed to renew loans until the end of February 1932. This agreement had a serious effect in London. Great Britain's short-term obligations had to be met. Her claims on Germany were then "frozen." While Great Britain was still solvent her realizable short-term assets were not as large as her short-term liabilities. She had been borrowing at short-term and lending at long-term. Meanwhile, for reasons mentioned earlier in this chapter,[1] her share of world trade had been going steadily down. The budget was threatened by the mounting costs of various kinds of social legislation. A steady run on London increased in spite of the assurance given by huge loans from France and the United States. With the exhaustion of these huge foreign credits, borrowed to meet the emergency, London gave up the struggle and abandoned the gold standard on September 21, 1931.[2]

The Abandonment of Gold and Recovery

When England abandoned gold, deflation ended and a steady recovery began. The same thing happened in other countries, as one after another abandoned gold. The deflation continued in countries like the

---

1.
2. Recovery, The Second Effort, Sir Arthur Salter, K.C.B., pp. 49-53.

agreed to in London, under which some of Germany's creditors agreed to renew loans until the end of February 1932. This agreement had a serious effect in London. Great Britain's short-term obligations had to be met. Her claims on Germany were then "frozen." While Great Britain was still solvent her realizable short-term assets were not as large as her short-term liabilities. She had been borrowing at short-term and lending at long-term. Meanwhile, for reasons mentioned earlier in this chapter,[1] her share of world trade had been going steadily down. The budget was threatened by the mounting costs of various kinds of social legislation. A steady run on London increased in spite of the assurance given by huge loans from France and the United States. With the exhaustion of these huge foreign credits, borrowed to meet the emergency, London gave up the struggle and abandoned the gold standard on September 21, 1931.[2]

<u>The Abandonment of Gold and Recovery</u>

When England abandoned gold, deflation ended and a steady recovery began. The same thing happened in other countries, as one after another abandoned gold. The deflation continued in countries like the

---

1.
2. Recovery, The Second Effort, Sir Arthur Salter, K.C.B., pp. 49-53.

United States and France where the desperate attempt to cling to "sound money" made recovery impossible and nearly brought on universal bankruptcy. During the eighteen months that followed 1931 the various paper currencies in the "sterling area" remained remarkably stable, while the gold currencies continued to fall disastrously, demoralizing business and creating serious political unrest. The index of wholesale commodity prices of the United States Bureau of Labor Statistics dropped 17% during the eighteen months preceding America's abandonment of the gold standard. During these same months, the general average of commodity prices in the "sterling group" remained approximately at the level of September 1931. Mr. Reginald McKenna, one of England's foremost bankers, wrote in 1933, "There can be no doubt that our departure from gold has paid us already a handsome dividend."[1]

Keynes' Penetrating Analysis

In 1930 Keynes made the following penetrating analysis of the difficulties involved in one phase of Great Britain's return to the gold standard:

---

1. Midland Bank Review, October-November 1933, Mr. Reginald MacKenna.

In the course of the six months which preceded and the six months which followed Great Britain's return to the gold standard in May 1925, it was necessary to raise the gold value of sterling by about 10% at a time when gold itself was not depreciating in value. This meant that the flow of money-incomes per unit of output: i.e., of rates of earnings generally, had to be diminished by 10% -- except insofar as a depreciation in the value of gold itself might come to the assistance of the transition. In other words, there had to be an Income Deflation in the strict sense of the word.

Equilibrium required that the flow of money-incomes and the rate of money-earnings per unit of output should be appropriately reduced. But in the first instance the fall of prices reduced, not costs and rate of earnings, but profits. The entrepreneur bore the brunt, and the only means by which the Bank of England's policy could restore equilibrium was to make him smart so severely that he could pass on the pressure to the proper quarters. The entrepreneur, faced with prices falling faster than costs, had three alternatives open to him -- to put up with his losses as best he could; to withdraw from his less profitable activities, thus reducing output and employment; to embark on a struggle with his employees to reduce their money-earnings per unit of output -- of which only the last was capable of restoring real equilibrium from the national point of view. In the long run, however these alternatives might be compatible, if efficiency could be sufficiently increased, with a maintenance of money-earnings per unit of the factors of production.

The entrepreneur tried all three. To a surprising extent and for a surprising length of time, he submitted to the first; namely, the cutting down, or cutting off, of his profits. The leading industries -- the old textile industries, the heavy industries

> working coal, iron and steel, the railways and the farmers -- just took their losses and went on taking them, not merely for months but for years. The usual profits of these industries were diminished by tens of millions of pounds. The joint-stock form of organization, by which the control has largely passed to salaried people, probably prolonged the period of inertia longer than if the whole of the losses had fallen on the actual managers.
>
> It follows that the full development of unemployment was also longer postponed than might have been expected. But the entrepreneus availed himself from the outset of the second expedient as well -- the expedient of curtailing his less profitable activities. Five years after the consummation of the return to gold the curtailment of employment was still in operation in an unabated degree.
>
> There remains the third expedient -- of reducing the rates of money-earnings per unit of output. It may be that in earlier periods the pressure of sub-normal profits and the unemployment of factors of production may have operated more rapidly than they do now to achieve the objective of an Income Deflation.

I believe that the resistances to a severe Income Deflation, which is not merely a reaction from a recent Inflation, have always been very great. But in the modern world of organized Trade Unions and a proletarian electorate they are overwhelmingly strong. The attempt by the entrepreneurs to bring this expedient into operation culminated in the General Strike of 1926. But political and social considerations stood in the way of allowing the advantages won by the defeat

of the strike to be pushed home. Wage rates in particular industries have fallen heavily, but Dr. Bowley's general index of weekly wage rates was practically as high in 1930 as in 1924. Thus one could only hope for an increase in efficiency by which lower money-earnings per unit of output might be compatible with unchanged money-earnings per unit of the factors of production. At long last, perhaps, this will be the way of escape.

Meanwhile the loss of national wealth entailed by the attempt to bring about an Income Deflation by means of the weapons appropriate to a Profit Deflation was enormous. If we assume that only half the unemployment was abnormal, the loss of national output may be estimated at more than 100,000,000 pounds per annum -- a loss which persisted several years.

Fair Weather Standard

During the past hundred years no government has ever intended to stay on the gold standard. If the principal nations of the world were to return to the gold standard, every last one of them would expect to go off gold in case of a general war. It would be mere gambling to assume that there is not going to be

such a war. What is the meaning of a contract that everyone expects to be broken? The committment of a government to pay in gold works only so long as the gold is not wanted. Let any very serious crisis occur and the agreement is off. Gold standard advocates never tire of pointing out that the war and not the gold standard was the cause of the disturbances of the past twenty-five years. There is a great deal of truth in this. It is pure deception, however, to pretend that paper currencies were the cause of the evils of inflation and deflation that followed the war. No kind of currency could have prevented inflation during the World War, and no kind of currency can prevent inflation during the next war. Great wars come with sufficient frequency to suppose that any return to the gold standard will be a short-lived affair. It is a gigantic fraud for any government to pretend that it intends to maintain redeemability in gold. It simply can't be done and everyone who understands the subject knows it. No standard will work in a bankrupt country, but the gold standard breaks down even when there is a high degree of solvency.

such a war. What is the meaning of a contract that everyone expects to be broken? The commitment of a government to pay in gold works only so long as the gold is not wanted. Let any very serious crisis occur and the agreement is off. Gold standard advocates never tire of pointing out that the war and not the gold standard was the cause of the disturbances of the past twenty-five years. There is a great deal of truth in this. It is pure deception, however, to pretend that paper currencies were the cause of the evils of inflation and deflation that followed the war. No kind of currency could have prevented inflation during the World War, and no kind of currency can prevent inflation during the next war. Great wars come with sufficient frequency to suppose that any return to the gold standard will be a short-lived affair. It is a gigantic fraud for any government to pretend that it intends to maintain redeemability in gold. It simply can't be done and everyone who understands the subject knows it. No standard will work in a bankrupt country, but the gold standard breaks down even when there is a high degree of solvency.

CHAPTER VI
INFLATION

It is not surprising that misunderstandings and controversies have arisen over inflation. The term itself is used vaguely in several popular senses. Not only is the average man and reader confused as to the true meaning of this technical term; most popular writers as well differ in their interpretations, and even serious students of the subject do not agree among themselves as to just what is meant by "inflation." "Definitions cannot be more than tentative until bankers, financiers and economists have much clearer conceptions of the meanings of the terms they use."[1]

Popular Concepts

In the popular sense, inflation has thirteen or fourteen very common meanings. It may mean an increase in the "amount of paper money"; that is, legal tender government notes, or "wild cat" bank notes. It is used to signify an increase in the volume of credit, "devaluation", abandonment of the gold standard, a rise in the prices of stocks, bonds, commodities, or real estate, an addition of silver

---

1. The Money Revolution, Sir Charles Morgan, Webb, p. 15.

to the monetary base, an expansion of broker's loans, the adoption of a managed currency; in fact, it may mean anything that the speaker or writer may have in mind at the time of speaking or writing. With popular writers especially, failure to define the term in the sense intended is the rule rather than the exception. As a result, readers of popular economic literature on inflation attain no understanding of the subject. It is, of course, only natural for writers to disagree as to the meaning of the term. However, intelligent discussion ends when one party to a discussion does not know what another party means by an important term. For which reason the banker and the social reformer find it difficult to act in harmony on inflation. To each, the other's meaning of the term is utterly incomprehensible. The "average man", who has an important stake in a number of things that are materially affected by inflation, must have a clear understanding of the term if he is to realize the effect of the process on him.

Authoritative Definitions

Serious students of the subject have given a great deal of care to defining the term "inflation"; still there is no agreement as to meaning. H. Parker

Willis held that "inflation is a problem not, as commonly supposed, of money and credit, but of production and distribution in the economic sense of those terms."[1] This concept of the term is different from that of most economists who usually include in their definitions the idea of a rise in prices, with or without an increase in the volume of money. Some very able authorities are willing, for the sake of simplicity, to consider any rise in prices as inflation, and any fall in prices as deflation. This is the view held by Lionel D. Edie.[2] Foster and Catchings suggest that the term "inflation" be used "to denote any increase in the volume of money that is accompanied by a rise in the general price level."[3] Still other definitions imply that inflation is an increase of the media of exchange, without any corresponding increase in the quantity of goods produced, and a consequent increase in the general price level. This view is expressed in the careful definition of Keynes:

> "When a further increase in the quantity of effective demand produces not further increase in output and entirely spends itself on an increase in the cost unit fully

---

1. The Economics of Inflation, Willis and Chapman.
2. Money, Bank Credit and Prices, p. 186.
3. Money, p. 55

> proportionate to the increase in effective demand, we have reached a condition which might be appropriately designated as one of true inflation.[1]

Kemmerer seems to agree with Keynes in substance, although he has expressed the idea in a somewhat different way:

> Inflation exists in a country whenever the supply of money and of bank deposits circulating through checks, so-called "deposit currency", increases relatively to the demand for media of exchange in such a way as to bring about a rise in the general price level.[2]

Some of the above definitions are somewhat narrow in that they exclude a rise in prices from non-monetary causes. A shortage of goods with no decrease in the media of exchange may result in a rise in prices. Such a condition also constitutes inflation.

<u>Fiat Money Not Inflation</u>

An issue of any medium of exchange -- gold, silver, government paper, bank notes, or deposit currency -- is not, of itself, inflation, if such issue is not followed by a rise in prices. Too often

---

1. <u>The General Theory of Employment, Interest, and Money</u>, John Maynard Keynes, p. 303.
2. <u>Kemmerer on Money</u>, Edwin Walter Kemmerer, p. 45.

popular opinion identifies inflation with the issue of fiat currency. Thus, other forms of inflation may occur unnoticed. To be strictly accurate, fiat currency is not of itself inflationary. However, if it is issued in excess of the amount necessary to support the existing price level, it does result in inflation. The layman can hardly be expected to understand that if an equivalent amount of solid gold were issued under similar circumstances that the result would be the same -- inflation. Fortunately, monetary authorities are aware that disastrous inflations occur when there is a complete absence of fiat currency. This was true in 1920 and in 1929 in the United States. It appears also that in the fantastic inflation that occurred in Germany after the war, marks were backed, mark for mark, with German government bonds.[1] The notes of the German central bank, the Reichsbank, were handed over to the Government for German bonds; theoretically, a very "sound" procedure. These notes were not fiat currency, but this supposedly conservative procedure set an all time high for inflations. Fiat currency has accompanied some of the most spectacular periods of inflation, as well as some of the most stable

---

1. Kemmerer on Money, Edwin Walter Kemmerer, p. 76.

periods. It is, therefore, merely incidental. It is neither a characteristic of inflation, nor one of the usual causes; and the widespread assumption that it is both leaves us politically unprepared to prevent the more subtle forms of this monetary disease.

Managed Currency Not Inflation

Another misconception which arises from failure to define "inflation" carefully, is the notion that managed currency and inflation are identical. Of course, no competent economist holds any such view. This is, however, a popular misconception. If governments or banks were to use the power of management only for the purpose of expanding the media of exchange, the result would certainly be inflation. Of course, this has not been the case. Management implies contraction as well as expansion. In recent years, under systems of managed currency, prices have actually fallen in a number of important cases. This was true in England and Sweden, over considerable periods of time. The confusion of thinking in which managed currency is identified with inflation is largely due to the belief, not entirely unfounded, that politicians are reluctant to take any steps that

periods. It is, therefore, merely incidental. It is neither a characteristic of inflation, nor one of the usual causes; and the widespread assumption that it is both leaves us politically unprepared to prevent the more subtle forms of this monetary disease.

Managed Currency Not Inflation

Another misconception which arises from failure to define "inflation" carefully, is the notion that managed currency and inflation are identical. Of course, no competent economist holds any such view. This is, however, a popular misconception. If governments or banks were to use the power of management only for the purpose of expanding the media of exchange, the result would certainly be inflation. Of course, this has not been the case. Management implies contraction as well as expansion. In recent years, under systems of managed currency, prices have actually fallen in a number of important cases. This was true in England and Sweden, over considerable periods of time. The confusion of thinking in which managed currency is identified with inflation is largely due to the belief, not entirely unfounded, that politicians are reluctant to take any steps that

will have a contracting effect. Furthermore, the advocates of a managed currency are frequently also those who, during a period of severe deflation want "reflation." It is natural, therefore, that at such times, the public would identify currency management with inflation. In spite of the fact that there is nothing at all automatic about modern currency systems, there is still a lingering belief that such systems are and should be automatic. With those who hold such views, any artificial tampering with purchasing power, such as would be the case with a managed currency, is inflation.

Depreciation of Foreign Exchange Not Inflation

Sometimes inflation is accompanied by depreciation of currency in terms of a foreign exchange. However, inflation can and does take place when there is a complete absence of such depreciation. A definition which assumes that the depreciation of one currency in terms of another is inflation, is incorrect. Internal prices may fall or they may be stabilized in terms of a depreciated currency. After England abandoned the gold standard in 1931, prices in England fell slightly at times and were generally stabilized, although, in terms of the American dollar, the pound

had depreciated. Furthermore, even under the traditional gold standard, world-wide inflation occurred while the exchanges remained undisturbed. Depreciation of a currency may or may not be accompanied by inflation, and inflation may or may not cause depreciation in terms of foreign exchange. The by no means insignificant inflation in the United States in 1929 was not accompanied by depreciation of the dollar. Those who held the idea that the flow of international gold would regulate the level of world prices, assumed that a depreciating exchange rate was synonymous with inflation. As a matter of fact, the inflation, even under the traditional gold standard, must come first; otherwise, imports do not tend to increase, gold does not flow out, and the bank rate does not fall. Depreciation of exchange is merely an occasional result or symptom and not to be considered an essential characteristic of inflation.

Various Quantitative Increases Not Inflation

While some might still insist that an increase in the quantity of currency which does not result in a rise in prices is inflation, that is hardly a practical consideration as no harm is done by this increase. There could hardly be condemnation

of an increased quantity of money to take care of increased needs of trade. If there were no price increases due to increases in the quantity of money, it is safe to say that there would be no controversies about it. Therefore, it is practical and correct to define "inflation" in terms of rising prices.

Inflation is neither fiat currency, nor managed currency, nor depreciated exchange rate; rather a rise in the price level due to a change in the relationship of the media of exchange to the quantity of goods. The same may be said of depreciation in terms of gold. Furthermore, since neither gold nor foreign exchange are stable or fixed in value, it is impossible to use either as a measure of the degree of inflation that takes place in any currency.

War Inflation

An examination of any price series extending over the past 150 years will disclose the fact that the great periods of inflation have been during war times and shortly thereafter. The three great inflations in the United States during the past 150 years occurred during the Napoleonic Wars, during the

Civil War, and during and after the World War. Prices also rose rapidly during Washington's administration because of the French Revolution. According to a table prepared by Warren and Pearson, prices reached a peak of 193 on the index in January 1815.[1] A post-war inflation, such as accompanied the period following the World War, did not take place after the Napoleonic Wars; on the other hand, prices suffered an immediate sharp decline. By March of 1821, the index stood at 98, indicating a price decline of nearly 50%. The price increases that occurred in the United States during the Napoleonic Wars and during the Civil War were practically the same in extent as the price rise during the World War. Civil War prices reached a peak of 223 according to the Warren and Pearson index in January 1865, and, as was the case after the Napoleonic Wars, a rapid decline followed. At the close of the World War in November, 1918, the price index had reached 199. During the three months following the signing of the armistice, prices receded slightly. In February 1919, the index had dropped to 190. However, the drastic, immediate, and consistent drop in prices that had followed the other two great war periods

---

1. Gold and Prices, p. 12-14

did not take place in 1919. Instead, there occurred a further sharp rise which reached a peak, in May 1920, of 244.[1]

All wars are not accompanied by inflation. During the Crimean War there was actually a slight drop in prices. However, all great wars inevitably lead to inflation which, furthermore, tends to spread and to become nearly universal. During the French Revolution prices in the United States rose 70% on a metal basis.[2] From 1913 to the time that the United States entered the World War the price level had risen 62%. By 1918, even neutral countries had experienced a great inflation. In Denmark the average was 304; in Norway, 345; in the Netherlands, 373.[3]

Non-Monetary Basis

A period of war in which changes take place rapidly is an opportunity to study both the monetary and the non-monetary characteristics of inflation. To begin with there is an immediate and urgent need for goods. The demand for munitions and equipment is insistent at a time when the nation's ability to produce more goods is limited by withdrawal of young

---

1. Gold and Prices, Warren and Pearson, pp. 12-14.
2. Ibid., p. 16.
3. Money, Bank Credit and Prices, Lionel D. Edie, p. 282.

men from productive activity. Women, youngsters, and the aged are called upon to make up the labor shortage, and the land and capital resources of the country are worked with feverish activity. Marginal agricultural lands are brought under cultivation, and new industrial plants constructed. Nevertheless, it seems impossible to fill the apparently limitless requirements. Meanwhile the nation must eat, and while forced sacrifices are made, the usual consumption requirements of a very active people are high.

War Exigencies

No scheme for stabilization could possibly overcome the exigencies of a great war. Under the stress of future great wars, nations will resort to inflation, as they have done in the past. While stable money is an important consideration, when the existence of the nation is at stake, the injustices of inflation become of secondary importance. A large part of the productive output of the nation must be appropriated for war purposes. Theoretically, this appropriation could be paid for by taxes, in which case there would be no inflation. However, a war might prove unpopular, and the morale of the public would undoubtedly fall if the ~~actual~~ cost of the

war were known. In 1917-1918 both England and Germany were spending about 50% of the national income.[1] No nation could take such a large proportion of the national income in taxation. It is always necessary to resort to other expedients to raise money, and these expedients are inflationary. If wages were kept at the same level and all revenue were raised by taxation, real wages would drop substantially. If prices are allowed to rise, through some inflationary means, and money wages do not rise as fast as prices, real wages fall. Nevertheless, the public is not aware of this drop in real wages, as there is an illusion of increased wages. There are more dollars in the pay envelope. Because of the insurmountable political difficulties that would be involved in lowering money wages, or of taxing wages heavily, governments always let prices rise. The day of reckoning comes later.

Under war conditions governments cannot wait for goods, as the need is immediate. If this urgent demand were paid for by money raised through taxation, or by borrowing out of savings, there would be a necessary decrease in the purchasing power of those taxed, or of those whose savings had been decreased. However, governments cannot afford to be so

---

1. Money, Bank Credit and Prices, Lionel D. Edie, p.309.

virtuous in fiscal matters during war times. Loans are made directly from banks, or payments are made in legal tender notes. In either case the media of exchange are increased in volume, and since the limited physical industrial capacity of the country makes a corresponding increase in goods impossible, prices rise.

The combination of competitive bidding by the government and plenty of new money in circulation leads to a psychology of confidence similar to that during a cyclical business boom. Manufacturers and speculators bid against each other and a cummulative spiral of rising prices, more money, and further bidding by both government and business men develops. With both government credit and bank deposits expanding, and no apparent limit to war requirements, the inflation feeds upon itself until the end of the war or later.

Inflation in Neutral Countries

There are differences of opinion as to what causes inflation in neutral countries during a great war. Why did prices rise 62% in the United States between 1913 and 1917? The United States was not at that time involved in war financing. There was certainly nothing unorthodox in American banking practice

during those years, except that the new Federal Reserve Act had been inaugurated. Some authorities hold that the great demand for goods is the answer. There was a heavy demand, not only from the warring countries, but also from neutral countries that were shut off from making purchases in Europe. The favorable export balance of the United States grew steadily during pre-war years. Since the United States was about the only great industrial area remaining from which Europe could draw war materials, farm products and munitions were shipped to the full extent of available tonnage. A seller's market prevailed everywhere and almost any price could be obtained for some products. Meanwhile financial changes of great importance were taking place. Gold and securities were flowing into the United States in payment of the large excess balance of exports. Monetary gold stocks increased from $1,853,000,000 in August 1914, to $3,105,000,000 in March 1917.[1] The new Federal Reserve System used this gold very efficiently. Using the gold as a basis, the Federal Reserve system rapidly expanded deposits and notes. By March 1917, demand deposits had grown to

---

1. The Economics of Inflation, Willis and Chapman, p. 81.

$7,537,000,000, and monetary circulation to $4,173,000,000.[1] Now, what caused prices to rise? Willis and Chapman hold that "it is not at all necessary to fall back upon the statistics of gold production or importation or upon those of bank credit for the years in question, in order to explain the advance of commodity valuations."[2] They would explain the inflation entirely in terms of the unusual demand for commodities. Warren and Pearson, on the other hand, look for the explanation in the fact that "the reduced demand for gold, because of the substitution of paper currencies.... reduced the value of gold and caused inflation in countries that continued on a gold basis."[3] Warren and Pearson also pointed out that between 1914 and 1917 monetary gold stocks in the United States increased 70%. These authorities admit that it was a mere coincidence that the increase in monetary gold stocks in the United States so nearly approached the percentage of increase in prices -- 62%. Doubtless the view expressed by Professor Edie is the conclusion more nearly correct:

1. The Economics of Inflation, Willis and Chapman, p. 81.
2. Ibid., p. 84.
3. Gold and Prices, Warren and Pearson, p. 298.

> "The rise in prices was made possible by this new purchasing power, after the way had been prepared by the remarkable export prosperity of the country."[1]

War Financing

When the United States entered the World War, the price level had already risen substantially. The war requirements of the United States added tremendously to the excessive demands that were already being made on industry. The new supplies of gold and plentifulness of lawful money in the reserves made possible a great credit expansion. Price-fixing measures were adopted in numerous essential products, and these measures did, for a time, prevent prices from soaring. The United States Treasury was practically empty at the beginning of the war in 1917. Loans were placed immediately and the Federal Reserve Banks helped materially in carrying these loans. When a government borrows directly from a bank and the securities are not sold to the public for savings, the credit that is created is similar to the issuing of legal tender notes. The method is different, but the result is equally inflationary, except for certain psychological factors. During the war, the public debt was increased to approximately twenty-seven billion dollars. Billions of dollars of this government

---

1. Money, Bank Credit and Prices, Lionel D. Edie, p. 314.

debt were held by the banks, either in their own account or as security for loans. Demand deposits increased to $21,223,715,000.[1] In addition to this great expansion in purchasing power, the Federal Reserve Banks issued about three billion dollars' worth of Federal Reserve notes. Inflation in the United States, therefore, seems to have depended ultimately upon the expansible mechanism of the Federal Reserve System.

The war inflations that Germany, England, and France experienced were fundamentally similar, although the immediate financial causes were different owing to various money and banking customs. Although Treasury Notes were increased by about 360,000,000 pounds and Bank of England Notes by 120,000,000 pounds, these notes did not cause the inflation in England. It was rather the large sum of deposit currency. The English system is not unlike the American in this respect. France, on the other hand, experienced a substantial inflation, resulting almost entirely from a note issue. Paper francs are the principle supply of money in France. These were bank notes and not government notes, as the Bank of France, like the Federal Reserve Banks, was a private bank.

---

1. The Economics of Inflation, Willis and Chapman, p. 87.

debt were held by the banks, either in their own account or as security for loans. Demand deposits increased to $21,583,715,000.[1] In addition to this great expansion in purchasing power, the Federal Reserve Banks issued about three billion dollars' worth of Federal Reserve notes. Inflation in the United States, therefore, seems to have depended ultimately upon the expansible mechanism of the Federal Reserve System.

The war inflations that Germany, England, and France experienced were fundamentally similar, although the immediate financial causes were different owing to various money and banking customs. Although Treasury Notes were increased by about 300,000,000 pounds and Bank of England Notes by 120,000,000 pounds, these notes did not cause the inflation in England. It was rather the large sum of deposit currency. The English system is not unlike the American in this respect. France, on the other hand, experienced a substantial inflation, resulting almost entirely from a note issue. Paper francs are the principle supply of money in France. These were bank notes and not government notes, as the Bank of France, like the Federal Reserve Banks, was a private bank.

---

1. The Economics of Inflation, Willis and Chapman, p. 87.

Debt Burden at Cessation of Hostilities

The cost of the war has been variously estimated. One of the more conservative estimates, which includes merely the outlays of governments, comes to a figure of $275,000,000,000.[1] We are so accustomed to reading astronomical figures since the war that they do not carry their full significance. However, this staggering debt finally wrecked the monetary systems of every important country in the world.

For a few months after the war it looked as though history were going to be repeated. As prices in a number of countries fell slightly, it seemed that the usual great deflation that followed the cessation of hostilities after other wars was again going to take place. In the United States, wholesale prices receded about 5%. But presently, governments began to feel the pressure from debt and from the heavy outlays necessitated by the return to peace. These outlays caused the further large-scale unbalancing of budgets, the creation of more credit, and consequently peace-time inflation.

The relative amount of inflation in the various countries during the war was mild compared with the orgies of inflation that took place in

---

1. A Primer of Money, Woodward and Rose, p. 198.

Central Europe after the war. During the months following the signing of the Armistice in November 1918, the flood of war expenditures subsided. However, there were new and large financial burdens incident to demobilization and the reconstruction of the devastated areas of the continent. For obvious reasons, the United States and England were spared some of these heavy burdens. Germany and her allies were saddled with an enormous reparations debt under the Treaty of Versailles, and every country involved, felt the burden of interest on debts accumulated during the war. After other great wars of the past century, nations were able to balance their budgets after the ending of hostilities, but the unprecedented expenditures and destruction of the World War made such a balancing impossible.

At the close of the war price levels had already risen substantially:

TABLE IV

Price Levels of Five Countries
at Close of World War (a)
(1913-100)

Countries	Index November 1918
Great Britain	229
United States	203
France	358
Italy	437
Germany	234

(a) Money, Bank Credit, and Prices, Lionel D. Edie, p. 280.

Price Disparities, November, 1918

Not only had the price level risen in the various countries, but there were also great price disparities among the various price groups. Wholesale prices rose more sharply than other prices, while rents and wages tended to lag. The cost of living rose in about the same proportion as the general average. Farm prices rose to great heights. Inflation in particular products created a badly unbalanced condition in the whole price system at the close of the war.

Post-war Inflation -- France

In France, after a setback similar to that in the United States in 1920-1921, a real business recovery began. The volume of industrial output doubled in three years. There were all of the earmarks of a business boom. During the years from 1922 to 1926 wholesale prices in France rose from around an index of 300 to about 800. Except for a brief fall in prices in 1924, there was little or no break in the steady rise. From 1921 to 1924 gold exchange rates doubled. This post-war inflation in France was probably caused by a combination of two factors. The amounts of money in circulation increased steadily,

and as industrial production approached capacity, the volume of industrial output could not be increased rapidly enough to offset the increases in the volume of money. The budget continued unbalanced and the government failed to raise by taxation sufficient sums to cover expenditures.

For a few years following the war France expected to collect large sums from Germany.

The Expectation of Reparations

France therefore had, in addition to an ordinary budget, a separate budget of "Expenses Recoverable under the Peace Treaties." Every speculator in francs knew that the French budget depended on Germany. Late in 1921 it began to appear that the reparations payments were impossible. M. Briand's Government modified the terms of payment, but M. Poincare, in the following year, took a less conciliatory attitude, and Germany's request for a moratorium in July 1922 was refused. The mark collapsed, and in January 1923, the French occupied the Ruhr coal fields. As a result of this collapse of the mark, the franc fell sharply, and by the end of 1923 it had fallen to a value of only five cents. However France did move steadily toward a balanced budget. How far

France went in the matter of fiscal deficits may be seen from the following table:

TABLE V

Per Cent of Revenues of France Obtained by Borrowing[a]

Year	Per Cent
1919	79
1920	65
1921	55
1922	51
1923	48
1924	36

(a) Money, Bank Credit and Prices, Lionel D. Edie, p. 301.

Balanced Budget, 1927

In 1926 a Coalition Government, under M. Poincare, imposed drastic new taxes which were sufficient to balance the budget and to provide a sinking fund. As France moved toward a balanced budget, the tax burden had to be increased. By 1927, about 30% of the national income was being collected in taxes. If the burden of taxation had not been increased, the franc would have collapsed as several other European currencies had in earlier years. On one day, during July 1926, the franc had fallen to a

little above two cents in value. Early in 1927 the gold exchange rate was stabilized, and the franc was revalued at about one-fifth of its former value.

There was another element in the final spectacular rise of prices in France that enters into all such exceptional currency depreciation. There was an element of fear. The "flight from currency" was not so marked as in the case of Germany, but a real seller's market did develop, and as the value of the money shrunk steadily, buyers hastened to get rid of it before prices rose still higher. After the franc was stabilized in 1927, production in France continued to still higher levels until 1930.

France showed a great deal of financial virtue in stabilizing at any level, in view of the heavy costs of the reconstruction of her war-damaged areas.

Capacity Production and Unbalanced Budget

The fact that the supply of goods was limited was another contributing factor to inflation in France. As France approached capacity production after 1921 prices began to rise rapidly. The unbalanced budget alone would not have caused inflation if it were possible to increase production step by step

with increases in the media of exchange. The more spectacular advances of commodity prices sometimes come during the boom phase of the business cycle. The strains of a boom period prevent a great increase in production, but do not prevent increases in the relative quantity of the media of exchange. There is doubt as to whether the restrictions on production are due to lack of physical capacity. Estimates of capacity in recent years indicate that booms have come long before the nation has reached capacity. It is probable, therefore, that rigidity in the industrial system and restriction on production come from other sources. It is altogether probable that monopolistic control of prices may have something to do with the lack of flexibility in production and the relative shortage in the supply of goods.

Germany

The monetary history of Germany between 1914 and 1924 affords us not only an example of the horrors of inflation but also an exceptional opportunity to study, in enlarged form, the characteristic phases of this price phenomena. In this particular example the cause and effect relationships stand out

more clearly than is the case in less violent price upheavals. It is possible to trace each departure from orthodox monetary practice, and its effect from the time the war started until the vicious spiral of rising prices finally carried the price index to 126,160,000,000,000 in December 1923.[1]

Vast Wealth Redistribution

One great advantage of the inflation was that all internal debts, both public and private, were wiped out. From the point of view of a patriot who had lent the Government his life's savings this was not an unmixed blessing. Insurance policies and savings deposits became worthless. Government bonds and the bonds of other public and private institutions fell with the mark. Practically all members of the middle class were ruined. According to the report of the Second Committee of Experts under the Dawes Commission, between seven and eight billions of gold marks were acquired by the sale of paper marks to foreigners.[2] But foreigners were not always on the losing side. Many came into Germany with "hard" money during the course of the inflation, and taking advantage of the situation acquired huge amounts of

---

1. Money, Bank Credit and Prices, Lionel D. Edie, p. 288.
2. Ibid., p. 347.

real estate and other tangible property. The disproportionate holdings of property by certain classes is one of the excuses given for the unreasoned attacks on non-Aryan people in Germany since the rise of Hitler. A few skillful manipulators became fabulously rich, while great classes of the most substantial people of Germany were literally robbed of their savings.

At the end of 1923 there were several kinds of currency in circulation, but the authorized circulation alone amounted to 518,000,000,000,000,000,000 -- 518 billions of billions of marks.[1] The extent of the currency depreciation has been illustrated by numerous statistical statements. One will serve to show how fantastic the changes in money value were. The total mortgage debt of all Germany before the war amounted to 40,000,000,000 marks. At the end of the inflation, all of this debt could have been paid with one American cent.[2]

Four Stages of German Inflation

For convenience the inflation in Germany may be divided into four periods: first, from July 1914, to November 1918, during which time the price level had a little more than doubled; second, the interval from

1. *A Primer of Money*, Woodward and Rose, p. 159.
2. *Ibid.*, p. 160.

November 1918, to April 1921, when the Reparations Commission fixed Germany's debt to the Allies at 132,000,000,000 marks.[1] The index of prices at that time was a little under 1400. It had fallen from a little above 1500 early in 1920.[2] The third period extended from April 1921 to January 1923, when France and Belgium occupied the Ruhr coal fields. In this period prices soared to an index of 278,500. Finally, the period of complete collapse between January 1923 and December 1923. A tabulation of dates and index numbers shows graphically the acceleration of the price spiral in each of the different stages:

TABLE VI

Index Numbers of Wholesale
Commodity Prices in Germany 1914-1923[a]
(1913-100)

Date	Index
November 1918	234
January 1921	1,440
January 1923	278,500
December 1923	126,160,000,000,000

(a) Money, Bank Credit and Prices, Lionel D. Edie, pp. 280, 300.

1. Kemmerer on Money, Edwin Walter Kemmerer, p. 77.
2. Inflation, Leonard P. Ayres, p. 17.

Relatively Mild War Inflation (1914-1918)

At the outbreak of the war Germany did not impose new taxes. It was confidently expected that the war would be short and that the enemy would pay the bill. She therefore followed the policy that was so popular with other warring powers, of obtaining revenue through borrowing. When the opposition proved more formidable than was expected and the war was prolonged, taxes were raised somewhat. But heavy borrowing continued, and during the four years of war the national debt increased sixfold. Throughout the war advances to the Government by the Reichsbank increased steadily. Loans from the Reichsbank were obtained chiefly by the discounting of treasury bills. Paper money increased from about three billion marks to twenty-nine billion at the end of November 1918. Demand deposits of the Reichsbank rose from 858,000,000 marks to 10,700,000,000 marks.[1] By the date of the Armistice, bills held by the Reichsbank exceeded twenty billion marks.[2]

Early Post-war Depreciation (1918-1921)

This method of financing the war in Germany was, of course, inflationary, but no more so than that of France and Italy. In fact, price levels were higher

---

1. Kemmerer on Money, Edwin Walter Kemmerer, p. 76.
2. Currency and Credit, R. G. Hawtry, p. 405.

at the end of the war in both France and Italy than they were in Germany. However, shortly after the Armistice was signed, an acute budgetary crisis developed in Germany. The shock of defeat, and the social discontent of the returning soldiers, made it difficult, even impossible, to raise much revenue by taxation. There was already fear of inflation and those who could buy bonds would not do so. Therefore, there was really no alternative to further borrowing, and the balancing of the budget was postponed until the revolutionary attitude of the public could be modified. Considering the fact that there was a depression in Germany in 1919, it is amazing that the extent of the inflation was as great as it was. It is probable that in spite of the increase of purchasing power, the industrial machine could not be adjusted quickly enough to peace requirements. There must have been shortages, probably numerous "bottle necks," which prevented the speeding up of production to meet the increased demand. This situation was reflected in the demand for foreign goods. When the blockade was lifted, nine months after the close of the war, Germans began to import frantically to fill shortages of foreign goods of all sorts. Leonard Ayres believes that the existence of enlarged

at the end of the war in both France and Italy than they were in Germany. However, shortly after the Armistice was signed, an acute budgetary crisis developed in Germany. The shock of defeat, and the social discontent of the returning soldiers, made it difficult, even impossible, to raise much revenue by taxation. There was already fear of inflation and those who could buy bonds would not do so. Therefore, there was really no alternative to further borrowing, and the balancing of the budget was postponed until the revolutionary attitude of the public could be modified. Considering the fact that there was a depression in Germany in 1919, it is amazing that the extent of the inflation was as great as it was. It is probable that in spite of the increase of purchasing power, the industrial machine could not be adjusted quickly enough to peace requirements. There must have been shortages, probably numerous "bottle necks," which prevented the speeding up of production to meet the increased demand. This situation was reflected in the demand for foreign goods. When the blockade was lifted, nine months after the close of the war, Germans began to import frantically to fill shortages of foreign goods of all sorts.

Leonard Ayres believes that the existence of enlarged

stocks of money need not result in serious and progressive price advances if depression prevails.[1] If Ayres' opinion is sound, it must have been the disorganized condition of German industry that permitted the coincidence of a business depression and inflation at the same time.

Reparations Commission (1921-1923)

Between the spring of 1920 and the spring of 1921, conditions in Germany improved. Production increased rapidly and the mark experienced a period of repose. In fact, prices receded for about a year. The recession was largely the result of renewed confidence in the mark. The tax reforms of 1920 were beginning to bear fruit. The public began to buy treasury bills and the "flight from the currency" ceased. In April 1921, the Reparations Commissions fixed the debt to the Allies. The first large cash payment of a billion gold marks had to be paid before September of that year. Neither the small reserves in the hands of the Government nor the current tax receipts were adequate to meet the payment. Germany had either to raise the money on short term credits or to sell paper marks in the foreign exchange markets. It is a debatable question as to whether Germany should have, or

---

1. Inflation, p. 21.

stocks of money need not result in serious and progressive price advances if depression prevails.[1] If Ayres' opinion is sound, it must have been the disorganized condition of German industry that permitted the coincidence of a business depression and inflation at the same time.

Reparations Commission (1921-1923)

Between the spring of 1920 and the spring of 1921, conditions in Germany improved. Production increased rapidly and the mark experienced a period of repose. In fact, prices receded for about a year. The recession was largely the result of renewed confidence in the mark. The tax reforms of 1920 were beginning to bear fruit. The public began to buy treasury bills and the "flight from the currency" ceased. In April 1921, the Reparations Commissions fixed the debt to the Allies. The first large cash payment of a billion gold marks had to be paid before September of that year. Neither the small reserves in the hands of the Government nor the current tax receipts were adequate to meet the payment. Germany had either to raise the money on short term credits or to sell paper marks in the foreign exchange markets. It is a debatable question as to whether Germany should have, or

---

1. Inflation, p. 21.

could have raised, more money from taxes. From 1921 to the final collapse of the mark in December 1923, by yearly borrowing Germany increased the per cent of revenue obtained.[1] In the latter part of 1923, 99.9% of its revenue was raised by borrowing. Hawtry says that Germany did not comply with the primary condition that she should budget for her liabilities.[2] In this connection Lionel Edie cited Seligman to show that taxes in Germany were lower than those in the United Kingdom during the entire period from 1918 to 1924. In 1921-1922 the estimated percentage per capita taxes of per capita income in Germany was 23%, while in the United Kingdom it was 30%.[3] Since the deficit in 1921-22 was 6,600,000,000 gold marks,[4] it is very probable that adequate additional taxes could not possibly have been levied. In any case, if Germany paid the huge sums that were required in reparations payments, it would have been necessary for Germany to create enormous export surpluses. Considering the tariff history of the past twenty-five years it would have become increasingly difficult to raise surplus. Furthermore, the great deflation of prices in the

---

1. Money, Bank Credit and Prices, Lionel D. Edie, p. 298.
2. Currency and Credit, R. G. Hawtry, p. 426.
3. Money, Bank Credit and Prices, Lionel D. Edie, p. 299.
4. Ibid., p. 299, John Parker Young cited.

United States in 1920 had increased the gold value of the dollar. The growth of the value of the dollar made it more difficult for all countries to sell in the United States; all international debts consequently became more burdensome.

Occupation of Ruhr and Final Collapse

In July 1922, Germany asked for a moratorium, but France refused; the following January, France and Belgium occupied the Ruhr coal fields in a desperate attempt to make Germany pay. This move set off the most spectacular stage of the inflation. The speed and the proportions of the price rise in 1923 exceeded anything that the world had ever seen. The term "velocity" is correctly and appropriately used to describe what happened. A sort of "hyperinflation" prevailed, a situation in which the percentage of price advances exceeded the proportional increase in the quantity of money issued. No one wanted money and no one wanted anyone else to owe him money. There was literally a buyers' panic. Prices were marked up hourly and the "flight from money" was so great, that goods were bought regardless of their utility to the purchaser and merely to get rid of the money before it depreciated further. Foreign holders of marks dumped them on the market to save something

out of a bad speculation. Late in 1923 interest rates rose to 20% per diem. Finally, the Government redeemed the paper marks at the rate of one rentenmark to 1,000,000,000,000 paper marks. Warren and Pearson point out one more interesting fact in connection with this extraordinary series of events. Germany did not deflate! While she did experience all of the worst evils of a great inflation, she was spared the agony of a deflation. The stabilization took place at the fantastic price level attained at the end of the inflation.[1] What goes up, must come down? Apparently not.

1. Gold and Prices, Warren and Pearson, p. 293.

CHAPTER VII

PEACE-TIME INFLATION

Inflation 1920

"Although the United States was on the gold standard during the whole of the World War, the inflation was greater than that which occurred during the Civil War when the greenbacks were issued."[1] Prices had risen to an index of 199 in November 1918. After the signing of the Armistice there was an immediate halt in the inflationary movement, which would have come to an abrupt end at that time but for the financial policies of the Treasury Department and the Federal Reserve. The Treasury advanced loans aggregating $2,500,000,000 to various foreign countries.[2] At the same time there were shortages of goods in all parts of the world, including the United States, where a number of industries had been neglected because of the war. The huge loans to foreign countries, therefore, added to the scarcity of goods in the United States as the loans really took the form of exported goods. If these goods had represented exportable surpluses no inflation would have occurred. As things

---

1. Gold and Prices, Warren and Pearson, p. 298.
2. The Economics of Inflation, Willis and Chapman, p. 86.

stood, however, these shortages caused a typical boom with all of the symptoms of real inflation. While wages were high and rising, people complained of the high cost of living, and wages did not keep up with rising prices. There was continuation of war-time profiteering and great speculation, particularly in commodities.

"Easy Money" Policy, 1919

The rise in the price level was supported by the relatively easy money policy of the Federal Reserve banks. While long and short-term interest rates were high, the Federal Reserve kept the rediscount rates down to 4 and 4½%. Reserve balances rose from \$1,520,000,000 in November 1918, to \$1,820,000,000 in December 1919. During the same period demand deposits rose from \$12,724,000,000 to \$16,994,000,000, representing an increase of more than \$4,000,000,000. Prices rose from an index of 190 in February 1919 to a high peak of 244 in May 1920.[1]

Irresponsible Government Inflation

It was not without warning that the Federal Reserve banks followed a policy of easy money during 1919. Many of the officials of the System had grave

---

1. The Economics of Inflation, Willis and Chapman, p. 83.

misgivings. At various times during 1919 proposals were made to raise the discount rate, but there was strong opposition from the Treasury Department. The Secretary of the Treasury wanted a low interest rate to facilitate the floating of the Liberty Loan.[1] A higher discount rate would have depressed the bond market before the bonds could be sold to the public. At the request of the Treasury Department, therefore, the Federal Reserve postponed raising the rate until January 1920. Twelve million patriots oversubscribed the issue at 4½%.[2] Twelve million patriots were cheated, deliberately cheated, by the cooperation of the Treasury Department and the Federal Reserve banks. Interest rates were held down with the intention of raising them when the Liberty Loan issue was sold. Because of the developing deflation, many of those who bought government bonds at par were forced to sell them a few months later below 80 -- involving a loss of 20% within a few months' time.

The conniving of government financiers in rigging the Liberty Loan market was reprehensible in itself, and the consequences to the subscribers were serious. However, the ultimate losses to the nation were far greater than these losses to the subscribers

---

1. Stable Money, Irving Fisher, p. 217.
2. Money, Bank Credit and Prices, Lionel D. Edie, p. 304.

of the loan. Federal Reserve authorities knew that the easy money rates were contributing to a serious inflation which was primarily caused by the great demands for goods in both domestic and foreign markets, demands which exceeded the capacity of industry. Capacity would have been greater at that time, but for the development of numerous "bottlenecks" in the form of special shortages, which held up production in other lines. Long before 1920, there was grave need for contraction. A relatively mild contraction would have been enough to stabilize prices on a lower level. The unbalanced condition of American industry would have corrected itself and the "bottlenecks" would have been eliminated. Production could then have been speeded up to a higher level without reaching capacity so soon. Instead of following a more timely policy of contraction, and one that Federal Reserve officials clearly recognized as imperative, the Board postponed action until January 1920, at which time discount rates were raised from $4\frac{3}{4}\%$ to 6% in five of the twelve reserve districts. Two weeks later rates were raised to 6% in all districts. Except for a few agricultural commodities, prices continued to rise until May.

Untimely Deflation

Most students of the subject agree that some deflation was urgently needed and that the deflationary measures should have been taken at a much earlier date, but the blood-letting operation that was subsequently performed was hardly necessary. The inflation was largely economic and not financial, caused by a shortage of goods and only incidentally by an oversupply of money. By May 1920, reserves of the Federal Reserve banks had fallen to about 42% Now that the Treasury Department no longer objected to a higher interest rate and other deflationary devices the fear of the gold coverage seems to have been a most powerful factor in determining Federal Reserve policy. Officials became hysterical. There was fear for the convertibility of bank obligations. The gold coverage seems to have been more important to the Board than was the welfare of the country.

Coercion of Member Banks

At a meeting of the Federal Advisory Council and the Class "A" Directors of the Federal Reserve Board, held on May 18, 1920, a resolution was passed declaring for contraction of money and credit. Mr. John Skelton Williams, Comptroller of the Currency,

explained to the late John Simpson his efforts to prevent the drawing of the resolution. He said:

> "I told the other members of the board, 'Do you know that this will break lots of little country banks?'
>
> "They cold-bloodedly answered me: 'They ought to break -- there are too many of them.'
>
> "I then told them, 'Don't you know it's going to ruin lots of farmers?' and they cold-bloodedly replied to me: 'They ought to be ruined -- they are getting too prosperous; they will not work.'" [1]

The above-mentioned meeting was held in secret and was concealed from the public for over two years. W.P.G. Harding, who presided, warned the bankers present to hold the proceedings of the meeting in sacred secrecy.[2] Governor Harding called for "sacrifices" on the part of the public, "to bring about normal and healthy liquidation."[3] Under orders from the Federal Reserve Board, a veritable mania for deflation developed throughout the country. On June 1, the discount rate was raised to 7%. Banks were discouraged from making loans and switched to a policy of unloading government obligations. Member banks were urged to create a stringency of credit. Anyone

---

1. Congressional Record, May 2, 1933, Vol. 77, Part 3, 73rd Congress 1st Session, p. 2740.
2. Ibid., Congressional Board.
3. Quoted in Stable Money, Irving Fisher, p. 218.

who has a shadow of doubt as to the ability of the Federal Reserve Board to create a "healthy deflation" should read the literature of the twelve months following June 1920. Few had realized the power of the Board. In a surprisingly short time they had created a rigorous deflation, had put the dollar on a "sound" gold basis, and had ruined millions of American citizens.

Thoroughgoing Deflation

According to Willis and Chapman, "the panic of 1920 was nipped in the bud through well considered action by the banking authorities."[1] This is surely a classic masterpiece of understatement. A young and virile Federal Reserve System had its first deflation job to do and had to demonstrate to "old timers" that a good job could be done. Even the most ardent of gold-standard deflationists abroad agreed that it was a most thoroughgoing deflation. The United States Bureau of Labor Statistics index of wholesale commodity prices fell in thirteen months from 244 to 136. The Board must have been hypnotized by the idea of maintaining the gold coverage. There were still war shortages everywhere and yet production had to be curtailed for over a year to protect the gold cever-age. The 7% rate and other restrictions were

1. The Economics of Inflation, Willis and Chapman, p. 90

maintained long after prices had fallen well below a desirable level. Such measures were no longer anti-inflationary. Disastrous deflation had set in. The 7% rate was maintained until May 1921. It was then cautiously reduced to 6½%.

Refusals of Loans to Farmers

Any policy adopted by the Federal Reserve Board and followed by thousands of the leading banks of the country is bound to be effective. In 1920-1921 hundreds of thousands of farmers lost their farms and millions of workers lost their jobs because, according to Congressman Swing, of California, bankers were being ordered by the Federal Reserve to stop discounting paper.[1] Deputy Governor W. A. Day, of the Federal Reserve Bank of San Fransisco, told the bankers of Southern California, assembled at El Centro, that they were not to loan to any farmer any money for the purpose of enabling the farmer to hold any of his crops beyond harvest time. If they did, he said, the Federal Reserve bank would refuse to rediscount a single piece of paper on such transactions. He declared that all the farmers should sell all their crops at harvest time unless they had money of their own to finance them, as the Federal Reserve bank would

---

1. Congressional Record, May 23, 1922, Vol. 12, Part 7, 67th Congress, 2d Session, p. 7517.

maintained long after prices had fallen well below a desirable level. Such measures were no longer anti-inflationary. Disastrous deflation had set in. The 7% rate was maintained until May 1921. It was then cautiously reduced to 6½%.

Refusals of Loans to Farmers

Any policy adopted by the Federal Reserve Board and followed by thousands of the leading banks of the country is bound to be effective. In 1920-1921 hundreds of thousands of farmers lost their farms and millions of workers lost their jobs because, according to Congressman Swing, of California, bankers were being ordered by the Federal Reserve to stop discounting paper.[1] Deputy Governor W. A. Day, of the Federal Reserve Bank of San Francisco, told the bankers of Southern California, assembled at El Centro, that they were not to loan to any farmer any money for the purpose of enabling the farmer to hold any of his crops beyond harvest time. If they did, he said, the Federal Reserve bank would refuse to rediscount a single piece of paper on such transactions. He declared that all the farmers should sell all their crops at harvest time unless they had money of their own to finance them, as the Federal Reserve bank would

1. Congressional Record, May 23, 1922, Vol. 12, Part 7, 67th Congress, 2d Session, p. 7517.

do nothing toward helping farmers hold back any part of their crop, no matter what the condition of the market.[1]

Congressman Swing, who was present at the meeting, was vividly impressed by this direct application of "moral suasion." Commenting before the House of Representatives on May 23, 1922, he said:

> "No one could be in doubt for one minute as to what the natural, logical, and necessary consequences of such policy would be. If the entire crop of the country is thrown on the market at the time of harvest, of course the market would be depressed. You can 'bear' the market, or you can 'bull' the market. The Federal Reserve Bank deliberately set out to 'bear' the market. They succeeded so well that they broke the market -- not only broke the market, but broke the farmer as well."[2]

If the powers of the Federal Reserve Board could be used to injure the nation by causing the price level to rise and to whipsaw the same price level down into a cruel deflation, we need no further proof that these powers were adequate to stabilize the price level. Clearly the System could raise or lower the price level at will. Whether or not they should be trusted to do this in the public interest without mandatory rules is another matter.

---

1. Congressional Record, May 23, 1922, Vol. 62, Part 7, 67th Congress, 2d Session, p. 7517.
2. Ibid.

Mind Readers and the Federal Reserve

Speculators in stocks and commodities today complain that they must be mind readers in order to trade successfully. They must know what the president intends to do next. There is nothing novel about the plight of the poor speculator. Not only speculators, but also business men of all kinds -- retailers, wholesalers, manufacturers, farmers -- since 1913, have had to gamble on the next move of the Federal Reserve authorities. Some years ago Bradstreet's published a list of reasons for business failures. The list should be revised with at least honorable mention given to the Federal Reserve Board.

The writer, who was in business in 1920, knew nothing about the tremendous power over the price level possessed by the Federal Reserve System. Needless to say, after taking heavy inventory losses during that year in an otherwise very successful retail business, the writer got out of business, still unaware that the opinions of Governor Harding of the Federal Reserve Bank of Boston had anything to do with the business depression.

Reconstruction and Disequilibrium

To understand properly the disillusionment of the years following 1928, it is well to review the

progress made during the preceding decade. In 1919, the outlook was dark. Millions of workers had been either killed or disabled. There were shortages of food and raw materials. There were still revolutions taking place in several of the countries that had been at war. What seemed irreparable losses of physical property existed in the areas where the war had been fought and elsewhere staggering debts for reparations and war loans had to be paid. There was work to be done, but industry was disorganized and chaotic conditions prevailed in the financial and exchange markets. There were many who looked for the decline of Western civilization.

However, universal bankruptcy did not take place, and the gloomy forecasts made in 1919 were not fulfilled. Within a few years most of the physical damage had been repaired. By 1925, the yearly total of production exceeded that of 1913 by 18%. This increase in production was 12% greater than the increase in population, so the standard of living of necessity rose automatically. Even in Europe, the average man was again enjoying the standard of living that he had enjoyed in 1913.[1] Industrial progress from 1925 to 1929 was even more remarkable. New construction in the United States between 1925 and 1928 amounted to

---

1. Recovery, the Second Effort, Sir Arthur Salter, p. 28.

$38,000,000,000, an average of $800,000,000 a month for forty-eight months.[1] Unfortunately, progress was somewhat retarded by the fact that several nations had returned to the gold standard. The United States during this period merely "pretended" to maintain a gold standard.[2] It was not clearly recognized at first that progress was being made abroad in spite of the gold standard. The almost phenomenal increase in production, due mostly to technical progress and to adequate credit obtainable in the United States, was to some extent credited to the gold standard. By 1929, the standard of living in Europe as well as in the Western world was very much higher than in 1913.

Agricultural Inflation

From 1916 to 1920 farm prices rose very rapidly. During the greater part of the war farmers enjoyed an unprecedented prosperity. In comparison with the general price level, farm products were very high. During this inflation of farm prices, land values in the farming areas also rose. Many business men, as well as farmers, thought that the higher prices of farm land were justified, and that high prices for farm goods would be permanent. Had high prices for farm goods continued, it would have more than justified

1. Unemployment as a World-Problem, John Maynard Keynes, p. 6.
2. Monetary Reform, John Maynard Keynes, p. 215.

the rise in farm land values which, in 1920, averaged about 70% higher than pre-war levels. Some farmers were fortunate in selling their land at the higher levels, but during the era of speculation in land, many of them borrowed heavily in order to extend their farming operations. This speculative movement was supported by larger and larger mortgages from the banks upon the advice of the bankers.

Agricultural Deflation

During the war period, wages and other costs of living rose with the increase of land values. In 1920, an index of prices received for farm products had risen to 205; whereas, a similar index for wages paid to hired farm labor, had risen to 239.[1] Taxes, freight rates, and other costs also rose, but during the period of higher prices, farmers were unusually prosperous. When prices fell during 1920 and later, other costs fell less rapidly. The price of farm machinery and supplies and the other items mentioned declined, but did not reach such proportionately low levels as did farm products. Prices received for farm products fell 53% by 1927, while prices paid by farmers for commodities bought declined only 34%.[2] As prices

---

1. The Economics of Inflation, Willis and Chapman, p. 166.
2. Ibid., p. 167.

fell it became practically impossible to sell farm lands and the large mortgage indebtedness on land purchased at high prices, ruined hundreds of thousands of farmers. Some used the large profits of the war period to retire indebtedness, but they were a small minority. Farm land finally sank to 27% below pre-war values.[1] There were times when farm products could not be sold for the costs of production. In some cases, the prices obtained in the markets were lower than marketing costs. If this condition had continued, farm lands would ultimately have been valueless.

The whipsawing of farm prices during the war and post-war periods was due to forces entirely beyond the control of the farmers. As a group they might have been more cautious about speculation in land, but like others during the same period, they failed to recognize that the then prevailing conditions would be short-lived. Other forces were also beyond the control of the farmer. Mechanization was advancing in grain production as well as in other branches of industry. By mechanization the output per man increased enormously, but the market did not broaden correspondingly. The demand for food is

---

1. Gold and Prices, Warren and Pearson, p. 383.

inelastic. While technical improvements in the manufacture of motor cars, accompanied by lower prices, will increase the number of units sold rapidly, the same degree of improvements and falling prices do not increase the demand for food correspondingly. The point of satiety is reached very quickly with necessities. Man's appetite for food does not make for indefinite increases in demand. It is interesting to note, for example, that the per capita annual consumption of wheat flour in the United States has not been increasing. In fact, since 1889 it has fallen steadily from 224 pounds to 175 pounds in 1929.[1]

The depression in grain-producing areas has been world-wide. The main cause was the world's much greater capacity to produce agricultural products. After 1925 there was another important influence on the prices of agricultural products that entered the world markets. Agricultural economists have claimed that the price of American wheat, cotton, and other farm products was determined in Liverpool. The continuing deterioration of the economic structure in the agricultural sections was supposed to be due to the fact that price levels for farm products were artificially kept below the cost of production.

1. Recovery, the Second Effort, Sir Arthur Salter, p. 38.

While there is some basis for the point of view, it is incorrect to assume that the price of any world product is determined in Liverpool. Naturally, the supply of wheat in the provincial markets has a great deal to do with the world price of wheat. If the supply of wheat offered in Winnipeg or in Chicago increases, there is an immediate effect on all of the great grain markets of the world. Prices are adjusted by matched selling and buying orders as quickly as telegraphic orders can be communicated. These arbitraging transactions keep the various markets for world products at about the same level. It is more accurate to say that the grain-producing areas determine the price of wheat in Liverpool than to assume that the price is fixed by some diabolical scheme in the Liverpool market -- an assumption frequently implied.

When countries were on the traditional gold standard, and gold was allowed to flow freely between countries, price levels throughout the world tended to be equalized. What the agricultural economists probably wanted was devaluation in terms of other currencies, a practice which would undoubtedly have led to competitive devaluation.

When various countries returned to the gold standard, and followed a restrictive money policy

thereafter, foreign price levels fell. This did have an important effect on the prices of American commodities, such as cotton and wheat, that sold in a world market.

Reparations and Borrowed Funds

There were causes of disequilibrium other than the fall of agricultural prices. Orthodox financiers, who thought that the reparations and war debt questions were settled, proved to be very badly mistaken. The real situation was somewhat disguised by the unusual prosperity in the United States. The prosperity after 1924 in Central Europe was due to huge loans from America. It was a very real prosperity and production did rise. However, it was dependent upon continuous and very large streams of American capital. The flow of capital from America could not go on forever and when, because of lack of confidence, or because of capital demands elsewhere, the flow was cut down, it became apparent that conditions were not as sound as the experts had supposed. By 1928, it was apparent that it was going to be difficult for Germany to get the foreign exchange necessary for reparation payments. The net import of foreign capital into Germany from 1925 to 1928 amounted to the unbelievably

large sum of 15,000,000,000 gold marks. This sum exceeds the total amount paid in reparations right up to the Moratorium in 1931.[1]

Inflation 1929

The period between 1927 and 1929 proved to be a critical period. It is probable that the various maladjustments could have been corrected had it not been for the stupid financial juggling of the period. Europe was struggling under the weight of the gold standard. The United States, until 1927, was not so burdened. Not only was there plenty of gold, but it made no difference that there was. The gold had been sterilized by the action of the Federal Reserve banks. Governor Strong, of the Federal Reserve Bank of New York, had dominated the policy of the Federal Reserve banks and his policy was one of stabilization. In Europe, on the other hand, there was reaction. Money flowed to the United States. In order to reverse the flow, the discount rates in various countries were raised. In fact, what amounted to competitive bidding in this matter of increased discount rates took place all over Europe. Each country was interested in protecting its gold. The higher bank

---

1. Recovery, the Second Effort, Sir Arthur Salter, p. 166.

rates naturally had a depressing effect on business everywhere on the Continent and in England. A higher bank rate and consequent falling prices was always a sure recipe for a business depression, the price that countries had to pay to stay on the gold standard.

Federal Reserve's "Easy Money" Policy, 1927

In the spring of 1927, Montagu Norman, and other officials of European Central banks, visited the United States. They apparently persuaded Federal Reserve officials to follow an easy money policy. Such a policy was inflationary. This was supposed to help European countries to stay on the gold standard. It would have the effect of encouraging imports into the United States, thus encouraging trade abroad. A number of American financiers, including Sprague, had favored a lower discount rate for other reasons. There had been a decline in wholesale prices since the summer of 1926. In August 1927, discount rates were lowered and, as early as May, the System had resumed open market purchases: 230,000,000 dollars' worth of securities were purchased in the open market between May and November. Open market purchases are made with credit which is directly created for the purpose, thus increasing the total supply of money or credit. This creation of new funds invariably has

had an inflationary or anti-deflationary effect. The purchases made in 1927 were no exception, but from that time until 1929 the increased quantity of credit unfortunately encouraged an inflationary move of extraordinary proportion in the stock market. The Federal Reserve banks found it necessary to reverse the open market policy to curb the speculative outburst of early 1928: 400,000,000 dollars' worth of securities were sold in the open market. Discount rates were raised from 3½% to 4%. Later in 1928 the rate was again raised to 4½%. These anti-inflationary steps were taken without regard for business and industry. The earlier policy of stabilizing the commodity price level was being abandoned in an attempt to stabilize the manipulated activities of the stock exchange.

Contradictory Objectives

There were too many contradictory objectives entering into the policy of the Federal Reserve Board. The original purpose of the Federal Reserve Act, to accommodate business, was being set aside. Furthermore, when action was taken, it was usually taken too late and sometimes carried too far. Sprague felt that the defects of the System were not so much a matter of positive errors as they were a matter of hesitant action.[1]

---

1. Stabilization Hearings on H.R. 11806 (1928), cited in Stable Money, Irving Fisher, p. 252.

Attempt to Curb Speculation

What the System should do was warmly disputed in 1929. Commodity prices were falling, but the main preoccupation of the Federal Reserve was the stock market. The most sensational securities boom in history was taking place. By all indexes, there should have been a reaction long before. Stock prices were, however, being carefully manipulated and the public was being encouraged to buy at fantastically high prices. Five per cent could have been obtained on safe bonds, but the public was coaxed to buy stocks on borrowed money. Some of the stocks were yielding less than 2% in dividends and money rates were at times above 10%. The common stock of Radio Corporation sold as high as $540.00 a share. Later it fell to $2.50. At the height of the speculative mania call rates had risen to 12%. Higher rates in the American money markets attracted money from Europe to take advantage of the exceptional return. Each country tried to protect its funds by raising its own discount rates. This had the effect of further depressing industrial conditions in Europe.

In spite of the excesses that were taking place in the stock market, there were many bankers and economists who felt that it was of no concern to the

Federal Reserve. It was feared that to curb speculation by raising rates and by taking other deflationary measures would produce a decline in commodity prices and bring on a business depression. A business depression is a high price to pay to correct a speculative boom in the security markets. Among those who objected to meddling by the Federal Reserve were Carl Snyder and Gustav Cassel. Carl Snyder, head of the Statistical Department of the New York Federal Reserve Bank, thought that the speculation in the stock market was no concern of the Federal Reserve Bank. Mr. Gustav Cassel felt that raising the rediscount rates would deflate commodity prices and create unemployment.[1] Senator Glass seems to have been on the right side for once. He also objected. He said: "Why do you apply the rediscount rate to a condition of the sort and penalize the legitimate commerce in order to control something you say you have no right to control?"[2] Other leading monetary economists and financiers warned that an attempt on the part of the Federal Reserve Banks to regulate stock prices would have an adverse effect on the commodity price level. However, such deflationists as Dr. Miller, Governor Harding, and others, were determined to deflate at any cost. These men conceded that commodity

---

1. Cassel and Snyder cited in Stable Money, Irving Fisher, p. 254.
2. Senator Glass quoted in Stable Money, Irving Fisher, p. 258.

prices would fall. They recognized that business recession would follow. They went so far as to point out that business recession would of necessity bring about deflation of the security prices. This deflation is what they desired at all costs. Their open sponsorship of a major deflation did not end in 1929. Dr. Miller was still advocating deflation in 1932! Ways should have been found to regulate speculation in stocks without ruining business. Furthermore, it is probable that the extraordinary technical weakness of the market would have corrected itself. In fact those responsible for the manipulation of the stock prices would have seen to it that they came down in due time.

Some Federal Reserve officials felt a responsibility for the funds that were flowing into the stock market. It was argued that it was the credit that was being created by the Federal Reserve that was supporting the boom. In defending a policy of curtailment, Governor Harding of the Federal Reserve Bank of Boston said, "Continued high rates will eventually bring about a slowing down in business and industry."[1] Governor Harding seems to have been in favor of creating a business depression in order to curb the market. This was vicious muddleheadedness.

---

1. Quoted in Stable Money, Irving Fisher, p. 259.

If business continued to prosper, stocks would have been worth high prices, and although they were probably too high, it is doubtful that they were as exaggerated as we think today. Values would have been very different if the Federal Reserve had not discovered the taint of inflation in conditions that prevailed in 1928 and 1929.

Reasonable Business Activity, 1929

Business was above normal, but there was still 2,000,000 unemployed in 1929. There were still poverty and misery in the agricultural areas. Neither the wheat nor the cotton section had recovered from the deflation of 1920. The most reliable estimates indicate that production was $40,000,000,000 below capacity in 1929.[1] Commodity prices had been falling during most of the year and were falling somewhat more rapidly toward the end. Outside of the stock market, on the other hand, there was no inflation in 1929. Production was fairly well sustained and there is no reason except a monetary reason why there should have been a slump. The Federal Reserve certainly cannot stabilize everything, and it is not their business to do so. It is enough to expect them to stabilize commodity prices, employment, and business, without

1. The Chart of Plenty, Loeb and associates, Foreword by Stuart Chase, p. XIII.

going afield to stabilize Continental exchanges and the stock market.

The Crash

At exactly eleven o'clock in the forenoon of October 24, 1929, on the floor of the Stock Exchange, there were suddenly offered, "at the market," hundreds of thousands of shares of various kinds of stocks. This offering was not "public flocking." It was the initial signal for the most spectacular raid that the Stock Exchange had ever seen. The market had been "sold out" to the public and it is part of the business of stock marketing technique to "bear" the market after stocks have been distributed. The purpose of this "bearing" of the market is to afford an opportunity to reaccumulate stocks at lower levels when the "lambs" get discouraged or are forced to sell their stocks back because of hard times or margin calls. It was not important that stock prices were too high. The important thing to consider, and every trader knows it, is whether the public owns too much of the stock.

Bootblacks or Bankers

The part that the banks had in the securities inflation is very clearly explained in a supplementary essay to Willis and Chapman's book <u>The Economics</u>

of Inflation. The banks not only lent billions secured by stocks and bonds but they also added to their own holdings by several billions during the years preceding 1929. Total security loans to customers rose from $4,862,000,000 in 1924 to $8,304,000,000 in 1929. On June 30, 1930, according to the Annual Report of the Comptroller of the Currency, total loans and investments amounted to $47,298,000,000.[1] Evidently the events which preceded those of 1929 were not entirely public foolishness. The banks seem to have been arch-speculators. The business of a commercial bank is to lend money to worthy creditors. Willis and Chapman, commenting on the extent to which the slower and less liquid forms of bank holdings had invaded the portfolios of the different institutions during the ten years preceding 1929, concluded that reduction of liquidity amounted to about 40% before 1929.[2] Unfortunately the recommendations of banks before the crash were uniformly "bullish." After the crash, one would suppose that bootblacks and typists, not to mention the widows and orphans, had been responsible for the insanity.

---

1. Cited in Inflation in Securities, A. Wilfred May; p.296; Supplementary Essay to the Economics of Inflation, Willis and Chapman.
2. The Economics of Inflation, p. 127.

Deflation Not a Result of Inflation

Most writers assume that whenever there is inflation it must, inevitably and as a matter of natural law, be followed by deflation. This assumption is surely unfounded. Prices in France were stabilized at a level about 400% above pre-war levels. Even after the fantastic inflation in Germany, prices did not drop. The inflation in the latter case was certainly not justifiable, but it does prove the theoretical point that prices do not have to fall as a matter of natural law. It is usually a matter of administration as to whether prices will be put down after an inflation. If those who think that they should come down are in a position of financial power, strong enough to make them come down, then prices fall. If there is a group powerful enough to insist that prices be maintained on the inflated level, prices will be stabilized on that level. Financial power was on the side of deflation in the United States in 1920 and 1929; in these years we got deflation. The degree of deflation attained during the past two decades seems to have caused a revolution of thinking as to the desirability of such a "correction." Now, almost any dilettant monetary proposal calculated to have an inflationary effect can get a hearing in Washington.

There is one thing that we seem to have learned and learned well. We know how to end cyclical booms. All that is necessary to end such a boom is to create a more or less permanent depression. On a beautiful spring day in 1933, the American people had a holiday -- a bank holiday -- an opportunity to reflect upon the tremendous efficiency of our Federal Reserve System. This remedy for a boom, however, was no palliative. It was the kind of a remedy that cures the headache by removing the head.

Governor Strong and Stabilization (1921-1927)

It is hard to be dispassionate in discussing this question when one realizes that the methods of monetary and credit control were well understood and employed effectively in the United States prior to 1928, and that little or nothing was done between 1929 and 1932 to prevent or stay a 40% deflation of the commodity price level with consequent enormous shrinkage of the national wealth and national income. From 1929 to 1932 the Reserve Administration bought $217,000,000 of securities and liquidated $211,000,000 of acceptances.[1] This amounted to a virtual abandonment of open-market control at a time when such control was most urgently needed.

---

1. Recent Monetary Experiments and Their Effect upon the Theory of Money and Prices, Willford I. King, Journal of the American Statistical Association, p. 396.

The opinions of Governor Strong and the earlier effective policy of the Federal Reserve System were certainly not a secret. The whole financial world knew that the Federal Reserve banks had prevented inflation in 1923, and that in 1924 a threatened deflation was prevented by reversing the policy. Again in 1925, and early in 1926, action was taken to curb inflationary tendencies. In May 1927 the Federal Reserve banks resumed the purchases of government securities and again curbed a declining price level. Professor Fisher credits Governor Strong with having discovered the open-market powers of the Federal Reserve System. Governor Strong, in 1926, said that because the System held the country's gold and could control the reserves of many banks, it could influence the volume of credit; that is, by means of rediscount rates and open-market operations.

Deflationists in the Saddle

After Governor Strong's death the System seems to have come under the influence of deflationists like Governor Harding, of the Federal Reserve Bank of Boston, who, in the spring of 1929, advocated high interest rates which he believed would "eventually bring about a slowing down in business and industry." This deflation of

business, he believed, would affect security values adversely.[1] In 1930 the Federal Reserve Board was still in control of the monetary policy. But, what sinister power was in control of the Federal Reserve Board? Why did Dr. Miller, in 1930, 1931, and as late as 1932, oppose every move toward stabilization of the price level? By the summer of 1930 a serious deflation of commodity prices was well under way. In the face of a veritable avalanche of demands for action the Federal Reserve Board adhered sternly to a policy of deflation. In July 1930 one notable protest appeared in the Bulletin of the Royal Bank of Canada: "Immediate and decisive action on the part of the Federal Reserve banks in putting new funds into the market in large volume is what is necessary to arrest the present serious and protracted decline." However, the deflationists had their way. Dr. Miller and his friends were very successful. By permitting a deflation of bank credit of about $9,000,000,000 they succeeded in accomplishing a deflation of American property values of over $212,000,000,000.[2]

---

1. Stable Money, Irving Fisher, p. 259.
2. The Debt-deflation Theory of Great Depressions, Irving Fisher, p. 354. (Reprint from Econometrica)

business, he believed, would affect security values adversely.[1] In 1930 the Federal Reserve Board was still in control of the monetary policy. But, what sinister power was in control of the Federal Reserve Board? Why did Dr. Miller, in 1930, 1931, and as late as 1932, oppose every move toward stabilization of the price level? By the summer of 1930 a serious deflation of commodity prices was well under way. In the face of a veritable avalanche of demands for action the Federal Reserve Board adhered sternly to a policy of deflation. In July 1930 one notable protest appeared in the Bulletin of the Royal Bank of Canada: "Immediate and decisive action on the part of the Federal Reserve banks in putting new funds into the market in large volume is what is necessary to arrest the present serious and protracted decline." However, the deflationists had their way. Dr. Miller and his friends were very successful. By permitting a deflation of bank credit of about $9,000,000,000 they succeeded in accomplishing a deflation of American property values of over $212,000,000,000.[2]

---

1. Stable Money, Irving Fisher, p. 259.
2. The Debt-deflation Theory of Great Depressions, Irving Fisher, p. 354. (Reprint from Econometrica)

No Commodity Inflation, 1929

There was no deflation of commodity prices in 1929, a fact which makes the deflation policy of the Federal Reserve Board even more difficult to understand. Late in 1929 commodity prices began to decline. That should have been a warning to the Board. What was taking place in the stock market was no concern of the Federal Reserve Board, at least so far as their money policy was concerned. It was well understood that any attempt to deflate the stock market through credit contraction by the Federal Reserve banks would have the effect of deflating business and industry. Those members of the Federal Reserve Board who advocated deflation in 1929 indicated clearly that they believed that business had to be depressed in order to end the stock market boom. The stock market had gone too far, or perhaps the distribution into the hands of the public had been too successful. "In the case of the investment houses, which before the war had been engaged in financing new industries at their inception, in the period under discussion they operated to enable the owners of these identical industrial businesses to sell out their enterprises to the public and otherwise to manipulate their capitalizations for their own profit."[1]

1. Inflation in Securities, A. Wilfred May, Supplementary Essay to Economics of Inflation, Willis and Chapman, p. 303.

Planned Depression

Governor Harding and others were determined to deflate at any cost. These men conceded that commodity prices would fall. They recognized that business recession would follow. They went so far as to point out that business recession would of necessity bring about deflation of security prices. This deflation they desired at all costs. Their open sponsorship of a major deflation did not end in 1929. Dr. Miller was still advocating deflation in 1932!

The National Survey of Potential Product Capacity found that in the United States, the sum of monetary and imputed income for 1929 was $92,515,000,000.[1] There was a shrinkage of over 50% of this income during the years 1929-1932. The deflation cost Americans a decrease in yearly income of over $40,000,000,000.[2]

Dr. Miller probably thought that the stock market was defying physical laws and that it was his business to help nature restore order. The belief that what goes up must come down, and that therefore deflation must always follow a rise in prices, is pure nonsense. Transferring physical laws to another science with no logical reason for doing so, and acting upon the idea,

1. The Chart of Plenty, Harold Loeb and Associates, p. 132.
2. The Debt-deflation Theory of Great Depressions, Irving Fisher, p. 335.

is costly. During past centuries higher prices have been attained and maintained for long periods. But then, nothing was known of Roger Babson's brain-throb about laws of action and reaction and their application to economics.

Stabilization and Re-inflation, 1932

During the last year of Hoover's administration, in the spring and summer of 1932, the Reserve banks steadily bought government securities for a period approximating twelve weeks, and averaging about $100,000,000 per week. According to H. Parker Willis, these purchases were "paid for by Reserve banks through the creation of their own obligations."[1] The purchase of $1,100,000,000 of securities seems to have had the effect of staying a deflation, which, up to that time, had been gaining momentum. During May, June, and early July of 1932, all the great markets, including those of stocks, bonds, and commodities, quietly moved sidewise. Furthermore, during July, August, and early September of that same year, there was a substantial rally in all of these markets. The period from May to July 1932 was the first since 1929 in which all four of the above-mentioned markets were stabilized at the same time.

---

1. The Theory and Practice of Central Banking, Henry Parker Willis, pp. 197-198.

There had been liquidation in at least one of them at all times since 1929.[1] In other words, for four years there had been no time in which there had been no liquidation in one or another of the important markets. The significant point is that inflation ended with the resumption of open-market purchases.

Anti-deflationary Measures Necessary

In 1935 there were over $2,300,000,000 excess reserves in the Federal Reserve banks. Commenting on this, Leonard Ayres argued that it is the demand for credit and not supply that is important. Mr. Ayres, expressing the point of view of a banker, omits the important fact that bankers absolutely control the supply. Money always flows right back into banks. It flows out only when bankers permit the flow. In trying to prove a very bad case bankers have presented figures showing large discrepancies between requests for credit and the total recorded "lines of credit." In this, bankers have been guilty of the most obvious kind of deception. The largest and richest corporations have "lines of credit" greatly in excess of requirements. Most of them have, in recent years, financed working capital requirements

1. This has been carefully checked by the daily and weekly Dow Jones averages of industrial and railroad stock prices, with the Annalist wholesale commodity price index, and with the trend of bond prices in Barron's Weekly from 1929 to 1933.

with large cash balances that were originally raised through stock or bond issues for that purpose. They are not compelled to borrow large sums for short periods. The banks are aware of this situation and the publication of figures showing large unused "lines of credit" is deception.

However, insofar as there was a grain of truth in such statements as the above, it should be pointed out that an anti-deflationary policy in 1935 could not be as effective as a similar policy in 1930. It is not possible to lift a hundred-pound weight with a ten-pound lever. Furthermore, the fact that there were large excess reserves was not as important as the fact that the deflation had been stayed and an encouraging amount of re-inflation accomplished. More timely action is essential if the ordinary means of control are to prove effective. However, the financial history of 1932 proves that even tardy action is tremendously effective. In 1932 it was necessary, not only to bring about a re-inflation in the various markets, but it was also necessary to stay the force of a deflationary movement which, up to that time, had been gaining momentum. The open-market purchase of $1,100,000,000 worth of securities in the spring of that year was amazingly successful and, I believe, one of the most convincing proofs of the effectiveness of open-market control.

Money -- Supply and Demand

The price level is not, as some text books imply, the result of the demand and supply relationship of goods. It is rather the result of four factors; namely, the demand for money, the supply of money, the demand for goods, and the supply of goods. In a barter economy, the demand and supply relationship of goods does determine the value of each particular kind of goods in terms of other kinds of goods, but in a money economy, or in a credit economy, one-half of every exchange is either money or some kind of a credit instrument. If the wheat that is exchanged for dollars increases in supply, the value of the wheat is affected. Its value drops. The same is true of the dollars. If the supply of the media of exchange increases, their value decreases.

Other things being equal, the price level rises with an increase in the quantity or velocity of either money or credit. Of course, other things very seldom remain equal. If goods increase step by step with increases of money or credit, the price level remains the same. Inflation sets in with a too plentiful increase in the supply of money or credit. Conversely, deflation follows a more than adequate restriction in the supply of either. There is no implication in the

above statement that price levels are not influenced by non-monetary causes. They are so influenced. A fall in price levels may be due to increasing industrial efficiency, and such a decline may be adjusted by a controlled increase in the quantity of the media of exchange.

It is not an increase of money which alone causes inflation, but rather, a too plentiful supply. In practice, what constitutes a too plentiful supply is a tangled problem. The great sources are the natural supplies of gold and silver and the created supplies, which are the obligations of banks and governments. The total quantity of money may include various combinations of metal or certificates representative of metals, such as gold and silver certificates. Also, as a part of the total supply, there are government notes, bank notes and bank deposits.

Metal Inflation

The price level may be inflated by any kind of known money or substitute for money. Gold and silver have both caused inflation at various times for countries that were exclusively on one or both. In the Union of South Africa early in 1920, the exportation of gold was rigidly restricted. Since South Africa is a gold-producing country, the gold

above statement that price levels are not influenced by non-monetary causes. They are so influenced. A fall in price levels may be due to increasing industrial efficiency, and such a decline may be adjusted by a controlled increase in the quantity of the media of exchange.

It is not an increase of money which alone causes inflation, but rather, a too plentiful supply. In practice, what constitutes a too plentiful supply is a tangled problem. The great sources are the natural supplies of gold and silver and the created supplies, which are the obligations of banks and governments. The total quantity of money may include various combinations of metal or certificates representative of metals, such as gold and silver certificates. Also, as a part of the total supply, there are government notes, bank notes and bank deposits.

Metal Inflation

The price level may be inflated by any kind of known money or substitute for money. Gold and silver have both caused inflation at various times for countries that were exclusively on one or both. In the Union of South Africa early in 1920, the exportation of gold was rigidly restricted. Since South Africa is a gold-producing country, the gold

accumulated and the value of gold covereigns in South Africa was less than in other countries. A lower value of gold means a higher price level. The higher price level in South Africa, due to the quantity of gold, was inflation -- gold inflation.[1]

Silver has also caused inflation on a number of occasions, notably after the discovery of huge silver supplies in America about 1500. The great quantities of silver that were found in the New World, were first taken to Spain, and Spain first felt the inflationary effect. Prices began to rise immediately. Between 1501 and 1502 prices rose about 10%. From then on, prices rose continuously until 1601. Index numbers of commodity prices in Spain covering the 16th century show that the price level rose from an index of 33 in 1501 to 144 in 1601.[2] Prices rose even more rapidly in Andalusia, where the imports of silver centered. It should be noted that during the century, the amount of inflation due to silver imports was about 450%.

Monetary inflation through metals may also be caused artificially. During the Renaissance the constant debasement of the coins caused a gentle

---

1. Kemmerer on Money, Edwin Walter Kemmerer, p. 2.
2. American Treasure and The Price Revolution in Spain, E. J. Hamilton, Harvard Economic Studies, Vol. XLIII, No. 43, p. 403; cited in Gold and Prices, Warren and Pearson, p. 444.

accumulated and the value of gold sovereigns in South Africa was less than in other countries. A lower value of gold means a higher price level. The higher price level in South Africa, due to the quantity of gold, was inflation -- gold inflation.[1]

Silver has also caused inflation on a number of occasions, notably after the discovery of huge silver supplies in America about 1500. The great quantities of silver that were found in the New World, were first taken to Spain, and Spain first felt the inflationary effect. Prices began to rise immediately. Between 1501 and 1502 prices rose about 10%. From then on, prices rose continuously until 1601. Index numbers of commodity prices in Spain covering the 16th century show that the price level rose from an index of 35 in 1501 to 144 in 1601.[2] Prices rose even more rapidly in Andalusia, where the imports of silver centered. It should be noted that during the century, the amount of inflation due to silver imports was about 430%.

Monetary inflation through metals may also be caused artificially. During the Renaissance the constant debasement of the coins caused a gentle

---

1. Kemmerer on Money, Edwin Walter Kemmerer, p. 2.
2. American Treasure and The Price Revolution in Spain, E. J. Hamilton, Harvard Economic Studies, Vol. XLIII, No. 43, p. 403; cited in Gold and Prices, Warren and Pearson, p. 144.

inflation during the whole two hundred years. Inflation may also be caused artificially through devaluation. In this way the present administration reduced the gold content by about 40% and thereby increased the number of gold monetary units. This devaluation appears to have caused some inflation. It may be many years before a reasonably accurate estimate can be made of the extent of the inflation.

Government Note Inflation

Contrary to popular opinion, inflation through government notes is relatively infrequent. The great inflation in Germany was not accomplished by this means. There have been few such inflations in recent years. The Continental currency of Revolutionary War days was an example. An interesting sidelight on this historical example is the story that Lord Howe brought over a boatload of counterfeit money and distributed it in the Colonies in order to depreciate the currency. Apparently, inconvertible government notes are not inflationary in themselves. They do not depreciate rapidly unless they are issued in too plentiful quantity. In this they follow the same law that hard money follows. It is also true that if the country issuing them is threatened with bankruptcy as a result of war reversals, there will be a

flight from such a currency which speeds its fall. This was clearly brought out during the Civil War. The rise and fall of Northern and Southern currency coincided with the winning or losing of great battles. After the Battle of Gettysburg, the Confederate currency fell steadily. Later the bankrupt Confederacy could not redeem them. So far as the North is concerned, it is not exactly correct to refer to the Civil War inflation as an inflation of government notes. The Northern greenbacks were not issued in very great quantities. The great increase in the issues of notes were bank notes issued by the state banks. The combined volume, modified by the fortunes of war helped to cause the price level to rise. It is interesting to note that, in spite of the large issues of state and federal notes, the price level did not rise so far during the Civil War as it did in 1920, when the United States was very securely on gold.

Bank Note Inflation

Inflation through bank notes has been a somewhat more usual occurrence. The assignats issued in France during the French Revolution were bank notes. It seems that these also were counterfeited on a vast scale. "It has been reliably chronicled that seventeen printing presses and 400 men were employed in

England at that time to manufacture and carry on the traffic in this counterfeit money."[1] No currency, whether bank notes or any other kind of money, can retain its value if it is issued by the bale. There is apparently nothing intrinsically inflationary in any kind of currency. The assignats were backed by lands of substantial value -- lands that had been confiscated by the government. However, it makes little difference what the security behind an issue of notes is. The important thing is the total quantity of currency issued.

The English pound has been a fiat bank note since 1931. The same is true of the bank notes of every country that followed England's lead in 1931, all of the countries in the so-called "sterlingarea." The experience of every one of these countries proves that paper currencies are not inflationary. The value of bank notes in the "sterlingarea" was maintained by the simple method of limiting their quantity. There is a great temptation to issue a too plentiful supply of fiat notes such as these, since they do have a stimulating effect on business and politicians can, in this way, avoid the unpleasantness of levying taxes. During peace times, financing by fiat currency works very well;

---

1. Money Creators, Gertrude M. Coogan, p. 122.

during war times it is usually politically impossible not to issue a too plentiful supply.

Bank Deposit Inflation

The word, "deposit," according to Webster, means the placing of something for safe-keeping. Although Webster did not include the idea of borrowing from a bank in the definition of the term, one of its most important current meanings is just that. If the customer of a bank leaves $10,000 in a bank for safe-keeping, the banker records a $10,000 deposit. If the customer makes a loan of $10,000 at the same bank, the banker also calls that a deposit. How loans become deposits and how bankers' debts become our principal currency, are somewhat of a mystery to the average layman. Because banks create deposits by making bookkeeping entries, they are sometimes called "manufacturies of credit." The entry that is made to create a deposit is a debit to "Loans and Discounts," and a credit to "Deposits." The liability assumed by the creation of this deposit circulates in the form of checks.

There is another simple way of creating deposits. Whenever officials of the Federal Reserve System feel that there is need for credit inflation, securities are purchased in the open market, with checks drawn on nothing. In a single week checks may

be drawn for hundreds of millions of dollars for this purpose, thus creating large quantities of Federal Reserve bank credit. These checks are drawn in favor of those from whom the securities are purchased in the open market. In the regular course of business they are deposited in member banks. They are then turned back to the Federal Reserve banks, where they are credited to the member banks. These credits may then be used by the member banks for the expansion of their own deposit liabilities. There is a story told about an old lady who, when told that her account had been overdrawn at the bank, sat down and drew a check to replenish it. It is not so amusing when a central bank or a member bank does the same thing. In fact, it is the usual method of creating bankers' balances.

The creation of a currency medium through the making of a loan, and calling that loan a deposit is a refinement of modern banking. It is regrettable that this practice has no name of its own. It has become legitimate. It is now considered respectable, although a somewhat similar type of banking in medieval Venice was called "embezzlement."

Revaluation of Currency through Changes in Credit Volume

Not only in this creation and recording of fictitious loans dishonest accounting, but it also

takes the control of the total volume of the medium of exchange out of the hands of the government and transfers it to the banking system. Mr. R. G. Hawtry, Director of Financial Studies in the British Treasury, probably the greatest living authority on prices, says: "Whoever has control over credit does in fact determine the fluctuations of prices, and the magnitude and frequency of the alternations of inflation and depression."[1] Creation of demand deposits offsets every other monetary device. In the United States and Great Britain, bank deposits have become the principal medium of exchange. In the United States they account for over 90% of all transactions.[2] Credit has become so important that arbitrary changes in the total volume have the effect of revaluing the currency. Contraction of the volume of credit with a consequent decline in the price level increases the purchasing power of the dollar.

Flexibility on 3.5 Per Cent Gold Base

Individual bankers are not culpable. Most of them are unaware of the swindling involved in the creation and destruction of bank credit and the consequent effects on the price level. Many bankers and

---

1. Currency and Credit, R. G. Hawtry, p. 106; quoted in Stable Money, Irving Fisher, p. 82.
2. Managing the People's Money, Joseph Ernest Goodbar, p. 9.

even some economists argue that banks do not create deposits. There are elaborate arguments to prove this. However, the fact still remains that total demand deposits exceed by many times the total amount of cash in the country. As early as June 30, 1925, the monetary stock of gold coin and bullion in the United States amounted to only \$4,386,000,000; whereas, demand deposits, subject to check, were estimated at \$27,189,000,000.[1] While some argue that technically the individual bank does not create deposits, everyone admits that the system as a whole does create such deposits, and that is the important point.

The power to create substitutes for money on such a vast scale by both the central banks and the member banks should certainly be limited in the public welfare. The creation of loans which entail no sacrifice on the part of those who create them is very different from the making of loans by those who part with their savings. Ordinarily, for each dollar of credit created, the bank must have a credit of only 10 cents on deposit at a Federal Reserve bank. Since only 35% of this ten-cent credit must be in gold, the banks are actually creating credit on a gold base of 3.5%. A

---

1. Money, Bank Credit and Prices, Lionel D. Edie, p. 1.

even some economists argue that banks do not create deposits. There are elaborate arguments to prove this. However, the fact still remains that total demand deposits exceed by many times the total amount of cash in the country. As early as June 30, 1925, the monetary stock of gold coin and bullion in the United States amounted to only $4,360,000,000; whereas, demand deposits, subject to check, were estimated at $37,189,000,000.[1] While some argue that technically the individual bank does not create deposits, everyone admits that the system as a whole does create such deposits, and that is the important point.

The power to create substitutes for money on such a vast scale by both the central banks and the member banks should certainly be limited in the public welfare. The creation of loans which entail no sacrifice on the part of those who create them is very different from the making of loans by those who part with their savings. Ordinarily, for each dollar of credit created, the bank must have a credit of only 10 cents on deposit at a Federal Reserve bank. Since only 35% of this ten-cent credit must be in gold, the banks are actually creating credit on a gold base of 3.5%. A

1. Money, Bank Credit and Prices, Lionel D. Edie, p. 1.

large part of the reserves required for bank deposits is neither currency nor gold, but credit. "Building of bank credit on a foundation of bank credit is the result of a deliberate plan of those who framed our Federal Reserve Act. The purpose was to create a banking system that was 'flexible.'"[1] The system proved to be remarkably flexible. If the banks could be trusted no special regulation would be necessary. If credit had been honestly managed in the public interest, the extremely sensitive structure of deposit credit would have been the most effective instrument of stabilization. Governor Strong, former Governor of the Federal Reserve Bank of New York, succeeded in stabilizing prices from 1921 to 1927 through credit control. At other times, however, when it suited the sinister purposes of Federal Reserve authorities, to raise or lower the price level, powerful weapons of restraint were thrown aside. The commodity inflation of 1919, and the period of stock market insanity in 1928 and 1929, were both caused by bank credit expansion. The speculative credit upon which these booms grew was fiat credit, created at the discretion -- or indiscretion -- of the Federal Reserve banks. It proved to be even more dangerous than a similar amount of fiat notes.

---

1. Managing the People's Money, Joseph Ernest Goodbar, p. 15.

CHAPTER VIII

STABILIZATION

Flexible Equilibrium

There is no such thing as stability either in the physical world or in the realm of the economist. The most usual characteristic of prices is fluctuation. The economic system may be likened to a great ship which sways around a point of equilibrium, but which never remains constant for any appreciable length of time. If the ship sways too far to one side, it founders. There are periods of comparative price stability or calm. The years from 1921 to 1927 were relatively free from price gyrations. The price level rose and fell, the degree of inflation and deflation being so slight as not to endanger the economic system. In discussions of this kind this is the greatest degree of stability that can be attained. It is obviously impossible to accomplish absolute fixity. Avoidance of the excessive swaying away from equilibrium which took place on one side in 1920, and on the other in 1930-1932, is the objective of all legitimate stabilization proposals. Stabilization, in this paper, means stability of value. Stabilization, in the sense of fixation

of the weight of gold in the monetary unit, is no stabilization at all. It is, in fact, one of the greatest causes of instability. Such so-called "stabilization" under the traditional gold standard, with its periodic deflations to protect the gold base, is a fraud. It is responsible for the worst kind of instability, the kind that causes the economic boat to capsize.

"Modernized Gold Standard," Warburg

James P. Warburg stands out among backward-looking bankers for his advocacy of a form of gold standard which is, if anything, more vicious than the traditional gold standard. He refers to it as a "modernized gold standard."[1] The changes that Warburg would make in this streamlined variety of the gold standard are few. Bullion, which would be exclusively in the possession of the banks of issue and central banks, would be obtainable for export only. In other words, the banks are to be given a private monopoly of gold. To insure the effectiveness of this monopoly, Mr. Warburg proposes that cover for note issues be reduced 25%, a change which would merely increase the sensitiveness of economic stability to gold manipulation. There would obviously be a wider range of expansion and

---

1. The Money Muddle, James P. Warburg, p. 237.

contraction at the discretion of the banks. Gold movements would have more serious consequences -- bigger and better crashes.

Inflationists, Kemmerer

No economist can argue for the traditional gold standard without at times also advocating deflation; for periodic deflation is a necessary part of gold standard practice. Kemmerer, for instance, has on various occasions advocated deflation, and at other times he has strenuously opposed reflation. He apparently believes that an undue rise in prices must be corrected, but that a comparably serious deviation from normal on the down side should not be corrected. Kemmerer admits the great injustice of deflation, but holds that at times it "is absolutely necessary."[1] One of the reasons that he gave for his advocacy of world-wide deflation in 1920 was "the existing gold base was altogether inadequate safely to support ... paper money and deposit currency."[2] The deflation that Kemmerer and others advocated meant not only a fall in prices, but world-wide depression and political disturbances. No well-informed advocate of the traditional gold standard, like Kemmerer, has ever denied that

1. High Prices and Deflation, E. W. Kemmerer, p. 81. Quoted in The Story of Money, Norman Angell, p. 369.
2. Ibid.

periodic deflation and depression is a necessary consequence of strict adherence to the gold standard. It cannot be repeated too frequently, nor brought to the public attention too strongly, that these gentlemen mean occasional, artificially controlled, and rather severe business depressions, when they refer to their peculiar type of stabilization. No intelligent student of monetary science dares to deny that stabilization, in the very strange sense of fixation of the price of gold, could not possibly be accomplished without manipulation of money and credit in such a way as to periodically limit production by vast amounts.

Stabilization or Reflation

At the Imperial Economic Conference at Ottawa in 1932 there was surprising unanimity of opinion among the delegates from various parts of the Empire in favor of both reflation and stabilization. These delegates were not merely economists. They were the responsible representatives of the important nations of the British Empire. Mr. R. B. Bennett, Prime Minister of Canada, was Chairman of the conference and among the delegates were a number of very distinguished men. Among them, and representing the United Kingdom, was Mr. Neville Chamberlain, Chancellor of the Exchequer.

There was no general agreement at the Conference as to the method of attaining both reflation and stabilization. Mr. Chamberlain made it clear that England did not intend to return to the gold standard in the near future. He spoke in favor of "an ample supply of short-term credit at low rates" as a means of raising commodity prices, and said that the government was doing its utmost to prevent fluctuations in the value of sterling. It was the chancellor's opinion, as well as that of the other delegates, that international action and cooperation were urgently necessary.[1]

A statement made at the conference by Mr. N. C. Havenga, Minister of Finance of the Union of South Africa, is particularly interesting because of the fact that he was the representative of the greatest gold-producing country in the world:

> ".... while the world has reached a marvelous degree of perfection in its industrial processes, it has not yet, in the sphere of the measurement of material values, emerged beyond the somewhat primitive stage of employing a measuring rod which expands and contracts under the influence of the commodities which it measures."[2]

---

1. Imperial Economic Conference 1932, Report of the Conference, Ottawa, pp. 30-32.
2. Ibid., p. 145.

Not only was there agreement at the Ottawa Conference on the two important objectives of reflation and stabilization, but the resolutions of the Conference were indorsed a year later in the "Imperial Declaration" which was signed at the close of the London World Economic Conference.[1]

At the London Economic Conference there were two essentially different viewpoints. The delegates from countries in the "gold block" and the "sterlingaria" wanted temporary stabilization of exchange rates, which was to be followed by reflation through international agreement. On the other hand, the United States, although our delegates did not want to understand this, insisted on reflation first and on agreements in regard to stabilization of exchange rates later. Neville Chamberlain insisted that stabilization of exchange rates should come first. On July 3, 1933, President Roosevelt sent a message to the conference. It was amusingly undiplomatic, but there could be no possible mistake as to its meaning. It was clear, and had a ring of finality, that every member of the conference understood without the apologetic explanation of Mr. Warburg. It meant that we were not going to compromise on our reflation-stabilization policy, that stability

---

1. Stable Money, Irving Fisher, p. 313.

of domestic price levels was to come first. Commenting on the President's message, Keynes said: "He is magnificently right in forcing a decision between two widely divergent policies."[1] It was Warburg's job to interpret the President's message to the other delegations; yet, he described himself as "being completely unable to do so" and resigned.

In his letter of resignation to Secretary Hull, Warburg said: "I think that I see certain ideas forming in his (the President's) mind."[2] The implication was that the President had not as yet a clearly defined policy. A little later such a criticism might well have been directed at the President. However, in the summer of 1933, whether the President was right or wrong, his policy was definite and unmistakable. If Roosevelt had been as wise in his choice of delegates as he was in the reflation-stabilization policy followed in the summer of 1933, the London Economic Conference would not have been a "fiasco." Mr. Reginald McKenna pointed out that the one valuable result of the conference was "monetary clarification."

---

1. New York Herald Tribune, July 4, 1933; quoted in Stable Money, Irving Fisher, p. 358.
2. The Money Muddle, James P. Warburg, p. 122.

Manipulation of Gold, Warren and Pearson, Fisher

A proposal which was widely discussed during the early days of the Roosevelt administration and one which had a great deal of influence upon the monetary policy of the administration is the "commodity dollar" theory of Dr. George F. Warren and his associate, Dr. Frank A. Pearson. This "commodity dollar" theory is one of a number of "managed currency" theories which emphasize control through gold. Warren wanted the currency managed in accordance with a price index by changing the gold content upwards and downwards. His various books, particularly the 1935 edition of Gold and Prices, contain a vast amount of statistical data and charts designed to prove that the price of commodities goes up and down with the price of gold. Not only was Warren prepared to present formidable proof of his theories, but his plan also had the advantage of being a relatively simple one. According to Warren (and the President agreed with him) it was only necessary to raise the price of gold, and commodities would rise accordingly.

Many economists, even among those who advocate a managed currency, doubt that changes in the price of gold would have the immediate effect on prices that Warren sincerely believed they would. Those who still advocated the traditional gold standard attacked the

plan as a monstrous monetary policy. The public was pretty thoroughly scared with talk of rubber dollars, and people who have no idea of what a monetary unit is were convinced that disaster would be the inevitable consequence of the Warren gold policy. The opposition presented many inconsistent arguments, but the public did not know enough about it to realize that the claims were inconsistent. One of the leaders in this persistent and vicious campaign of fear, Mr. James P. Warburg, told the President that "if he would do what Warren suggested .... the domestic price of gold would not influence anything except the position of the domestic gold miners."[1] On September 20, a few months later, discussing the Warren plan, which had been partially adopted, the same Mr. Warburg told the public that inflation could not be forestalled a moment longer.[2] A plan which could not affect "anything but gold miners" was now about to cause drastic inflation. One need not be surprised at Mr. Warburg's inconsistency, or his wild and inaccurate forecasts. He admits that he is "not even a monetary economist."[3] Similar irrational exaggerations were very common, and entirely uncalled for.

---

1. The Money Muddle, James P. Warburg, p. 138.
2. Ibid., p. 146.
3. Ibid., p. 238.

The "commodity dollar" plan was not adopted in the manner Warren wished. Revaluation in a single drastic move to correct an intolerable situation does not provide for the continuing stability that Warren desired. However, the gold price of the dollar was changed and doubtless the change had an important reflationary effect. It did affect many things other than miners and it did not cause drastic inflation. In fact the plan of changing the price of gold was later criticized on the grounds that it did not cause prices to rise as much as its advocates claimed that it would. The opposition criticized the plan; first, because it was inflationary and second, because it was not.

Although the gold standard is a fairly recent institution in world history, there have been numerous changes in the weight of various monetary units. In 1834, long before the United States went on the gold standard, the weight of the gold dollar was reduced. The price of gold was raised from $19.39 an ounce to $20.69. In 1837, the price of an ounce of gold was again changed to $20.67.[1] Many changes have been made in the pound sterling. Originally, it was a pound of silver. As Warren and Pearson point out, although

---

1. Gold and Prices, Warren and Pearson, p. 292.

"the name is still retained it is not a pound, not sterling, and not silver."[1] At the present time it is not gold. It is a fiat pound, and under very trying circumstances, is working better than any metal pound every worked. There is hardly a gold currency in the world the weight of which has not been changed repeatedly. Chaos has not followed such changes. In fact more orderly business and stability have been the rule after revaluation. France avoided the depression of 1920 by allowing the franc to find its own level. It was later revalued and the new franc contained about one-fifth the amount of gold that the old franc contained. France thus avoided a great deal of deflation and business depression.

The Warren plan was similar in essence to that of Irving Fisher's famous "compensated dollar" proposal which was advanced in 1911.[2] Originally, the plan involved the abolition of gold coins and the conversion of gold certificates into "gold bullion dollar certificates" which the holder could exchange for gold bullion. The weight of gold obtainable would be the amount "officially declared to constitute a dollar on that date." Instead of "free coinage" and "free melting" at a fixed price, the government would buy

---

1. <u>Gold and Prices</u>, Warren and Pearson, p. 292.
2. <u>Stabilizing the Dollar</u>, Irving Fisher, p. 104.

or sell gold bullion at prices that would vary with fluctuations of an accepted price index consisting of a representative assortment of commodities. The weight of the dollar would be adjusted at stated intervals as the index deviated from a previously determined level. A small "brassage" fee would be imposed to prevent gold speculation.

Many writers seem unaware that Fisher's views have changed as to the most desirable means of accomplishing stabilization. While he is still substantially in agreement with the Warren school, his present personal views include, not only adjustments in the gold content of the dollar ("as few and slight as possible"), but also a number of devices designed to control credit volume. He recognizes the great importance of the total volume of checking deposits and would require that these be backed by 100% reserves. This requirement would effectively prevent the banks from creating and destroying the circulating medium. He would also rely upon the usual methods of open-market operations and control of the rediscount rates. Government debts would be reduced and non-interest-bearing government notes would be substituted for interest-bearing bonds up to the point needed to

maintain a stable price level. Fisher is not partial to the inclusion of silver in the monetary system, but would make any compromise that is politically feasible with those who want to retain silver.[1]

Inconvertibility, Keynes

In 1923, a few years before England and other countries returned to the gold standard, John Maynard Keynes outlined an elaborate program of monetary reform. Keynes is credited with having coined the phrase "managed currency." His views on the subject have doubtless had a profound influence upon the monetary policies of governments since England was forced off the gold standard in 1931. Business revival in various countries began with the adoption of some of Keynes' proposals. It is Keynes' belief that "the outstanding faults of the economic society in which we live are its failure to provide for full employment and its arbitrary and inequitable distribution of wealth and incomes."[2] His monetary proposals are designed to help correct these faults through stabilization of the internal price level.

Keynes has been a convincing advocate of an inconvertible currency for a number of years. He proposes the complete separation of gold from domestic

---

1. Stable Money, Irving Fisher, Pp. 396-397.
2. The General Theory of Employment, Interest, and Money, John Maynard Keynes, p. 372.

currency. The use of gold as an exchange medium would be limited to the settlement of international balances. Since it would not be employed in circulation, nor as reserves for note issues and credit, its main function would be as a store of value to be held "as a war-chest against emergencies." The authorities should correct temporary changes in the foreign exchange rates resulting from adverse balances of international payments by purchasing foreign exchange with gold. The more permanent changes in exchange rates would be adjusted by regulating the price of gold. One of the objectives of the Keynes plan would be to retain the stabilizing advantage of gold in foreign exchange and at the same time to avoid domestic price disturbances that are caused by great changes in the value of gold itself.

Internal price stability is to be attained mainly through control of credit by the central banks. The banks would be required to make use of open-market operations and changes in the discount rate to so control the volume of credit as to bring about a relatively stable price level. Government notes or bank notes would be of secondary importance and would be issued merely for convenience and to supply the banks with reserves to support their deposit liabilities at a level

which would be adequate to maintain the desired price level. Although actual price movements would be the most important guide, Keynes feels that "it is not the past rise but the future rise that has to be counteracted." Therefore the monetary authorities should be guided by a number of other factors such as "the state of employment, the volume of production, the effective demand for credit .... the rate of interest on investments of various types, the volume of new issues, the flow of cash into circulation, the statistics of foreign trade and the level of the exchanges."[1]

For an official price index, Keynes proposed that the authorities adopt a "composite commodity as their standard of value." The proposal of such an index makes the idea appear, on the surface, like Fisher's "commodity dollar" plan. It is, however, very different. Under the Keynes plan, both note issues and credit are completely divorced from gold. Furthermore, changing the gold content of the monetary unit as fluctuations in the purchasing power of the dollar occur, as Fisher proposed, is very different from changing the price of gold because of disturbances in the price of foreign exchange. In Keynes' plan, credit is controlled without regard to gold

1. Monetary Reform, John Maynard Keynes, p. 204.

reserves; while under Fisher's original plan, the banks would be required to maintain gold reserves just as they do at present. In the first case, stabilization is accomplished through the discretionary control of credit by the banks; in the latter, a stable price level depends partly upon mandatory changes in the mint price of gold.[1]

Consumers' Credit, Foster and Catchings

There is another group of monetary reformers, including Messrs. Foster and Catchings, J. A. Hobson, and others, who advocate the creation of "consumers' credits" of various kinds. The basic idea underlying these proposals is that purchasing power in the hands of consumers is not adequate to buy the total productive output. The shortage of purchasing power is attributed to the fact that industry withholds money from consumers, or that consumers themselves save too large a part of their earnings. These writers hold that production and consumption should be kept in proper balance by an even flow of money "from producer to consumer and from consumer to producer." Many such proposals include something in the nature of a bonus for everybody. These economists have made a very real contribution to the stable money movement and their views

1. Monetary Reform, John Maynard Keynes, pp. 203-204.

have been accepted, in part, by economists who belong to other schools of thought. There is much truth in Foster and Catchings' basic theory. The peaks and valleys of the business cycle could be considerably smoothed if there were "sufficient control over fluctuations in the amount of money available for use in consumption."[1]

A criticism of Foster and Catchings' theory of the "circuit flow of money," which in no way detracts from the value of the concept, is directed at the idea that savings cannot be effected without diminishing the aggregate sum of money which flows to producers. Goodbar observes that the flaw in this reasoning is the assumption that "productive activity is confined to producing consumption goods."[2] Savings are not usually hoarded, but are rather used very quickly to produce more durable goods. Savings are thus quickly returned to the productive process.

Keynes, who has a good word to say for these "over-saving or under-consumption" theories, nevertheless concludes that "it is a large volume of saving which does <u>not</u> lead to a correspondingly large volume of investment (not one which <u>does</u>) which is the root

---

1. <u>Money</u>, Foster and Catchings, p. 331.
2. <u>Managing the People's Money</u>, Joseph Ernest Goodbar, p. 21.

of the trouble."[1] The argument upon which Keynes bases this conclusion is a little involved, but logical. Simply stated, in terms familiar to Americans, it means that earnings are divided into two parts, current consumption and savings, and that the savings of the individual consumer may or may not be invested by a borrowing entrepreneur. If savings are invested in producers' goods, the investment is, in a sense, consumption -- productive consumption. If savings are not invested, current consumption plus productive consumption do not equal earnings. Falling prices and curtailed production inevitably result.[2]

"Gentle Deflation," G. D. H. Cole

There are a number of stabilization problems created by the trend of decreasing costs in industry. Any change which increases the efficiency of the factors of production tends to lower the prices of the particular articles as well as the general level of prices. In recent years there have been great technological improvements and the speed with which improved methods have been introduced is accelerating. Such changes are taking place continually

---

1. A Treatise on Money, John Maynard Keynes, Vol.I, p. 179.
2. Ibid., pp. 171-184.

and rapidly. There is, therefore, a constant pressure on prices. If the unit cost of producing an article falls, the producer can naturally sell the article at a correspondingly lower price and still make a profit. If the old price is retained the producer's profit is increased by the amount of the reduction in unit costs. If the total amount of money and credit remains constant, prices fall, and the consumer will, theoretically at least, get the benefit of the improvement. On the other hand, if the monetary authorities increase the total volume of money and credit enough to offset the effect of the technological improvements, prices will not fall and the producer will get the advantage of the higher price. What the monetary authorities should do about this tendency toward falling prices is an important practical question, and there is a wide range of opinion about it among monetary economists, among whom there are deflationists, gentle deflationists, stabilizationists, and gentle inflationists.

During the years preceding 1929 there were unusually great technological advances in industry. Who profited by the increased efficiency? Fraser, who is a gold standard deflationist, says that "the consumer was deprived of the advantage of lower prices

and rapidly. There is, therefore, a constant pressure on prices. If the unit cost of producing an article falls, the producer can naturally sell the article at a correspondingly lower price and still make a profit. If the old price is retained the producer's profit is increased by the amount of the reduction in unit costs. If the total amount of money and credit remains constant, prices fall, and the consumer will, theoretically at least, get the benefit of the improvement. On the other hand, if the monetary authorities increase the total volume of money and credit enough to offset the effect of the technological improvements, prices will not fall and the producer will get the advantage of the higher price. What the monetary authorities should do about this tendency toward falling prices is an important practical question, and there is a wide range of opinion about it among monetary economists, among whom there are deflationists, gentle deflationists, stabilizationists, and gentle inflationists.

During the years preceding 1929 there were unusually great technological advances in industry. Who profited by the increased efficiency? Fraser, who is a gold standard deflationist, says that "the consumer was deprived of the advantage of lower prices

through the inflation's keeping up to the level of prices."[1] However, his conclusion does not seem to be consistent with the facts. Between 1925 and 1929 prices of commodities fell. During the same years money wages rose.[2] Therefore, real wages must have risen. The advantages of increased efficiency were passed on to the consumer in the form of a higher standard of living. G. D. H. Cole, who is not so much in sympathy with the drastic deflationists, and might more accurately be described as a "gentle deflationist." believes that the best policy is "to allow price levels to fall" slightly, to partly offset increasing efficiency in any of the factors of production. He would, at the same time follow a deliberate policy of raising wages and taxes. One would be disinclined to quarrel with the combination of lower prices, higher wages and higher taxes. In fact, it seems a little Utopian. However, any deflation, even "gentle deflation" over a prolonged period, transfers an unfairly large proportion of the country's wealth to those having fixed incomes and to the creditor class, many of whom are non-producers. Another serious disadvantage of Cole's plan is that there would be little incentive to improve either the product or the method of production, if the profit were to be lost in lower prices

---

1. Great Britain and the Gold Standard, H. F. Fraser p. 79.
2. Gold and Prices, Warren and Pearson, pp. 325-326.

through the inflation's keeping up to the level of prices."[1] However, his conclusion does not seem to be consistent with the facts. Between 1925 and 1929 prices of commodities fell. During the same years money wages rose.[2] Therefore, real wages must have risen. The advantages of increased efficiency were passed on to the consumer in the form of a higher standard of living. G. D. H. Cole, who is not so much in sympathy with the drastic deflationists, and might more accurately be described as a "gentle deflationist," believes that the best policy is "to allow price levels to fall" slightly, to partly offset increasing efficiency in any of the factors of production. He would, at the same time follow a deliberate policy of raising wages and taxes. One would be disinclined to quarrel with the combination of lower prices, higher wages and higher taxes. In fact, it seems a little Utopian. However, any deflation, even "gentle deflation" over a prolonged period, transfers an unfairly large proportion of the country's wealth to those having fixed incomes and to the creditor class, many of whom are non-producers. Another serious disadvantage of Cole's plan is that there would be little incentive to improve either the product or the method of production, if the profit were to be lost in lower prices

---

1. Great Britain and the Gold Standard, E. F. Fraser p. 79.
2. Gold and Prices, Warren and Pearson, pp. 325-326.

and higher wages. A third difficulty with the plan is the fact that when prices are falling buyers hold back from making purchases, a fact which accounts for the depressed conditions that always accompany falling prices.

Gentle Inflation, Robertson

The history of price fluctuations shows beyond dispute that periods of gently rising prices have been periods of prosperity and usually periods of industrial peace and good will. On the other hand, periods of falling prices seem to induce depression and industrial strife. Even mild deflation dampens the enthusiasm of business men. What the business man thinks determines the course of business to a very great extent. Prospects of profit motivate expansion. Taking this fact into consideration, Mr. D.H. Robertson holds that we should create a spirit of optimism among business men by mildly raising prices, a sort of "gentle inflation." Robertson's reason for advocating occasional or "gentle" inflation is not so simple as the above statement suggests. He argues that during periods of inflation the capital equipment of the community is increased because wages lag behind prices, a condition which results in induced

saving by the community as a whole. Of course the savings go into the pockets of the entrepreneur class, a circumstance which does increase the permanent wealth of the community. During periods of deflation the reverse is the case. As Keynes points out, "higher real wages .... are enjoyed during a slump .... at the expense of normal capital accumulations."[1] Keynes is mildly sympathetic with Robertson's view. He concedes that there is need at times for "rapid transition" (for example, in war time) when forced saving and more rapid capital accumulation are justifiable. Inflation of any kind involves the transfer of wealth from one class to another. If the wealth so transferred were recovered by the community in the form of taxes such a "gentle" inflation would involve no injustice and needless depressions would be avoided.

<u>100% System, Fisher</u>

There is an ultra-conservative proposal that is being sponsored by a number of economists, and which is rapidly gaining friends even among bankers, who are usually a little slow to recognize the virtue in proposed changes. The plan is to revert to the very early deposit banking practice of requiring

---

1. *A Treatise on Money*, John Maynard Keynes, p. 293.

100% reserves. A Currency Commission would furnish the cash in exchange for part of the assets of the commercial banks, which assets would either be sold to the Currency Commission or deposited as security. In practice, the plan would be somewhat similar to the purchasing of securities in the open market by the Federal Reserve banks or probably not unlike the rediscounting of commercial paper. In any case, the commercial banks would be required to keep permanently cash reserves of 100% against demand deposits. This requirement would virtually convert the banks into warehouses for cash. The commercial banks would cease to be "private mints," but they would continue to carry on a checking business. Checks would be drawn against actual cash deposits. If a bank had demand deposits of $1,000,000 on the books it would have to have $1,000,000 of cash on hand.

The principle of 100% reserves has been applied to the gold notes of the United States and partially applied to the notes of the Bank of England. There is no honest reason why the same rule should not apply to deposit credit issued by commercial banks. The practice of lending the same money five or ten times over, as our commercial banks are doing, is not conservative, as some suppose. It is the old system of the goldsmiths, who began lending money that had

been entrusted to them for safe-keeping. Credit that is not backed by 100% reserves is fiat credit. The creation of a given amount of credit has an inflationary effect which is equal to that caused by a comparable quantity of "wild cat" notes. The right to issue currency is a prerogative of government and the banks have usurped this right. Commercial banks should be in the business of lending money and the "minting" of credit is not an integral part of the loan function.

The simplicity of the 100% system, its fundamental soundness, and the ease with which it could be introduced commend it above a number of less conservative plans that have been proposed. Currently the banks are complaining because they are virtually forced to buy government obligations. The interest-bearing debt of the United States on August 10, 1938, was $36,777,223,101[1] of which about one-third is owed to the banks of the country. If a Currency Commission were to relieve the banks of these government debts, giving in exchange government notes, or Currency Commission notes, the banks would then have sufficient reserves to go immediately on a 100% reserve basis.

It ought to be clear that the banks, the public, and the government would all benefit by this transfer

1. The Annalist, August 10, 1938.

of government securities and a reversion to sound deposit banking. In the first place, government obligations do not yield a very high return, and the banks would be in a position to deal in more profitable investments. The revenue from the securities which the banks would forego would be more than compensated for by service charges and the degree of safety that the whole banking system would enjoy. That the public would benefit by such a reversion to ultra-conservative deposit banking goes without saying. Runs on banks and bank failures would practically end. Banking and the monetary system would be simplified. Inflation, resulting from the creation of bank deposits out of nothing would cease, and the monetary authority (the Currency Commission) could, in such a system, manage the volume of currency in such a way as to prevent deflation and consequent business depressions.

Between 1929 and 1932 the Federal Reserve banks induced the banks of the country to destroy about $9,000,000,000 of credit that had previously been created by the System. Studies made in recent years of the ratio of the circulating medium to national income show that there must be a ratio of about one dollar to

about every three dollars of production.[1] Economists understand that there can be "bottlenecks" in the form of shortages of a particular kind of material which limits the volume of production. This may also be true of a shortage of transportation. It is not so widely realized, however, that there are financial "bottlenecks" as well. A shortage of money limits capacity and in a rather definite ratio. It takes about one dollar of credit to support three dollars of yearly production. If a dollar of credit is destroyed, yearly production is limited by about three dollars. According to Robert H. Hemphill, former Credit Manager of the Federal Reserve Bank of Atlanta, total circulation in 1929, including cash and credit, amounted to $27,000,000,000. National income in that year rose to $81,000,000,000, or three times the amount of the total circulation. By 1932 total circulation had shrunk to $16,000,000,000 and national income to $48,000,000,000. The ratio of the circulating medium to total national production was still the same: three to one. Hemphill finds that this proportion of circulation to production persists "with remarkable constancy, under widely varying conditions."[2] It is obvious that the destruction of

---

1. 100% Money, Irving Fisher, Foreword by Robert H. Hemphill, p. XX.
2. Ibid.

$9,000,000,000 of credit by the private banks of the country created an artificial monetary "bottleneck" and reduced national income by $27,000,000,000.

<u>The Retirement of Government Bonds for Notes</u>

A government bond that is issued in exchange for the savings of the people is not inflationary, but when bonds are issued in exchange for the created credit of the Federal Reserve banks, as has been done in recent years, such financing is inflationary. An issue of bonds in exchange for anything but savings is just as inflationary as an issue of legal tender notes. Furthermore, this type of government financing is more than a little ridiculous. A bond is an interest-bearing liability, while a government note or a bank credit is a non-interest-bearing liability. The bonds of the United States have behind them the taxing power of the government and all of the property and income of the nation. The same is true of government legal tender notes. The government exchanges its interest-bearing liabilities, backed by the best credit in the world, for the non-interest-bearing liabilities of the banks. The procedure is every bit as inflationary as though the government issued its legal tender notes in the first place.

Billions of dollars' worth of government obligations have been purchased by the Federal Reserve banks with checks drawn on credits which had been created out of nothing for the purpose of making loans to the government. There is no legitimate reason why such bonds should not be retired immediately. Such retirement would clear the way for monetary control which would prevent inflation and place the government in a position to insist upon sound banking. There has been a great deal of mythology written about the evils of government legal tender. Well-informed monetary economists know that if the carefully sponsored prejudice against government notes could be counteracted, much progress toward stabilization could be accomplished through the retirement of the government debt.

Stabilization, an Accomplished Fact

The question as to whether or not the price level can be controlled is no longer a matter of theory. Monetary authorities in various parts of the world have actually accomplished their various objectives in the matter of practically pegging the general level of prices within predetermined ranges. Yet Mr. Keynes' "practical bankers," with their reasonable doubts and

"carefully fostered" monetary mysteries, are desperately concealing and minimizing the facts. They say that the Swedish stabilization of the price level was a mere accident. They would have us believe that the experiment in Australia is Socialism. They overlook the fact that while Governor Strong lived the Federal Reserve Board prevented extreme inflation and deflation for seven years. Little or nothing is said about the fact that in 1932, during the last year of President Hoover's administration, extraordinary things happened to the price level as a result of an active policy of re-inflation. Probably, the guardians of esoteric monetary mysteries could tell us who controlled the deflation of 1929-1932.

Stabilization in Sweden

The price level does not change in any mathematical ratio in response to control, but the history of money and prices of the past fifteen years proves beyond dispute that price levels do respond to control as planned. At times stabilization through monetary control has been attained under extraordinary difficulties. For example, stabilization was accomplished in Sweden in spite of the Kreuger collapse which occurred six months after control was attempted. Furthermore, during the early period of Swedish

stabilization, world prices were declining with unusual momentum. This accomplishment is an excellent example of stabilization at a predetermined price level. As Professor Fisher says, "The three results are precisely what Sweden set out to accomplish; namely, halting deflation, preventing inflation, and stabilizing the Krona at home at the level of September 1931."[1] In this remarkable experiment the Riksbank kept the cost-of-living index within 1.7% of its predetermined norm, a fact which supports Professor Fisher's belief, "that it is possible to move price levels about at will." That Sweden did control the consumption price level as she set out to do, a fact formerly declared impossible, may be seen from the following table:

TABLE VII

VARIOUS COMMODITY PRICE INDEXES OF SWEDEN
(May 1932 to May 1934)[a]

	May 1932	May 1934	Rise
All Goods	109	113	4
Exported Goods	109	119	10
Imported Goods	93	95	2
Domestic Goods	110	116	6

a. The Economics of Inflation, Willis and Chapman, Supplementary Essay, Price Reflation by Erik T.H. Kjellstrom, p. 428.

1. Stable Money, Irving Fisher, p. 402.

There is great reluctance on the part of many monetary economists to concede the remarkable benefits that are accruing to Sweden from the stabilization policy adopted in 1931. In fact, some deny flatly that Sweden has stabilized. It is argued that the apparent stability is an accident resulting from the fact that one group of commodities happened to go up just enough to offset another group which happened to go down. It is true that Swedish monetary experts were not a little troubled by their early inability to raise the wholesale price level at the same time that they were stabilizing the consumption index. However, subsequent changes in the trends of their various price indexes, as computed by Kommerskollegiom, seem to indicate a somewhat greater degree of success. If reflation was the purpose of Sweden's monetary action, her policy was unsuccessful. However, reflation was not the primary purpose of Sweden's policy. The following quotation shows that the objective in 1931 was stability.

> "Mainly perhaps to reassure the public of its intention to prevent inflation, the Riksbank, upon abandoning gold, announced (with the agreement of the Swedish government) that it intended at least to maintain the purchasing power of the Krona in the hands of the consumers. Thus, for the first time in history, a country, announced that

> its policy would be that of stabilizing the currency, not with regard to gold or with regard to foreign exchange, but with regard to the internal purchasing power of its money."[1]

Sweden is still committed to a policy of stabilization of the domestic price level as distinguished from stabilization of exchange. If the 1931 policy was not a success, why did not Sweden abandon it? This policy was approved by the Riksbank, the Minister of Finance, and the leading monetary economists of Sweden. Furthermore, it is noteworthy that the Swedish policies of 1932 and 1933 have been merely modifications of the policy of the preceding year, which was not reflation, but stabilization.

At various times during the past seven years observers of conditions in Sweden have reported extraordinary business improvement there. The country has not only emerged from the slump, but has recovered to such an extent that the situation is being compared to the prosperity of pre-depression days. Many of the export industries have more orders than they can fill.

> Since 1933 there has been an unmistakable expansion which has carried the level of economic activity beyond that

---

1. Stable Money, Irving Fisher, p. 320.

> of the prosperous year 1929. The absolute total of unemployment registered by the Unemployment Institute diminished from a maximum of 189,000 at the beginning of 1933 to 50,000 in the third quarter of 1935.[1]

More recent reports of conditions in Sweden show that prosperity has been sustained. Conditions have been so good there that Sweden's index of industrial production was recently reported at 160 as compared with an index of 100 in 1928.[2]

Professor Fisher calls attention to the remarkable stability of the cost of living index, which he says the Riksbank undertook to stabilize.

> "Starting with 100 in September, 1931, it never rose higher than 101.7, and never fell below 98.4, for thirty-five months; that is, up to August, 1934. In other words, it ranged from 1.7% above, to 1.6% below the chosen par; and usually the deviation from par was less than 1%.[3]

The decline which occurred in the Swedish wholesale commodity price index before April 1933 is not to be compared with the severe deflations that took place in other countries during those months. Countries that were not following a stabilization policy at that time were victims of a directed

---

1. Monetary Policy and Crises, Brinley Thomas, pp.220-222.
2. Editorial by D. W. Ellsworth, The Annalist, July 1, p. 2.
3. Stable Money, Irving Fisher, p. 324.

deflation, the purpose of which, according to Professor Soddy, was to reduce the workingman to the subsistance level.[1]

Stabilization in Australia

The current stability of Australian prices is further proof of what can be done by planned control. The Commonwealth Bank of Australia undertook to stabilize the domestic purchasing power of the Australian pound at a level which was predetermined, but, unlike the Swedish experiment, the level decided upon was a higher level. In other words, the Australians reflated first and stabilized afterward. Australia, like Sweden, is leading the world out of the depression -- leading the world by pointing the way.

Familiar Devices

If the risk of trusting too much to private bankers were not so great and if the instruments of stabilization had not been used so recently to demoralize American industry and finance, stabilization could be accomplished without scrapping the present system. The Federal Reserve System has a number of very efficient devices which have at times been used

---

1. The Role of Money, Frederick Soddy, p. 197

successfully to smooth out the peaks and valleys of price movements. Most of these devices have a direct or an indirect effect on the volume of credit. If these devices are properly used, it would not be necessary to tamper with gold or with paper money. Devices such as "open market" operations, changes of the rediscount rate, raising or lowering of the reserve ratios, and "moral suasion" are expedients that would probably be used in any practical plan that can be devised. But it is necessary that these devices be used to stabilize the price level rather than to unsettle it.

Rediscount Rates

The most important of the devices ordinarily used is the rediscount rate, which the central banks raise to prevent prices from rising excessively, and lower to encourage borrowing and to raise prices when there is a tendency for them to decline. An advance in the rate restricts borrowing, as it is not so profitable to borrow at high rates. The margin of profit is reduced. On the other hand, borrowing is stimulated by low rates.

During periods of extreme boom or drastic slump, demand for loans is inelastic. If a real psychology of boom exists, raising the rate a point

or two causes little, if any, curtailment of demand for loans. In 1920, the discount rate was raised to 7%. On the other hand, the inelasticity of demand for loans is even more baffling during a drastic slump. During a depression the demand for loans by the public seems to be displaced by an unfilled demand for borrowers on the part of the banks. It is conceivable that interest rates could be dropped to a negative point or below zero, as Silvio Gesell suggests, but such schemes are as yet considered impractical.[1] Changes in the rate are still limited as they approach zero. Low rates alone are not as effective a stimulant to borrowing as high rates are in curbing a boom. The efficiency of changes in discount rates in either direction depends on borrowers, and while borrowers may be discouraged by excessively high rates, it is not so easy to induce them to borrow under depressed conditions even if money rates are low.

Open Market Operations

It is usually necessary, particularly during a period of depression, to supplement the changes in rates by other devices such as open-market operations. The banks merely buy or sell in the markets, just as other buyers or speculators do. Theoretically,

---

1. The Role of Money, Frederick Soddy, p. 175.

or two causes little, if any, curtailment of demand for loans. In 1920, the discount rate was raised to 7%. On the other hand, the inelasticity of demand for loans is even more baffling during a drastic slump. During a depression the demand for loans by the public seems to be displaced by an unfilled demand for borrowers on the part of the banks. It is conceivable that interest rates could be dropped to a negative point or below zero, as Silvio Gesell suggests, but such schemes are as yet considered impractical.[1] Changes in the rate are still limited as they approach zero. Low rates alone are not as effective a stimulant to borrowing as high rates are in curbing a boom. The efficiency of changes in discount rates in either direction depends on borrowers, and while borrowers may be discouraged by excessively high rates, it is not so easy to induce them to borrow under depressed conditions even if money rates are low.

Open Market Operations

It is usually necessary, particularly during a period of depression, to supplement the changes in rates by other devices such as open-market operations. The banks merely buy or sell in the markets, just as other buyers or speculators do. Theoretically,

---

1. The Role of Money, Frederick Soddy, p. 176.

it makes little difference what is bought or sold; notes, bonds, stocks, or commodities. However, in practice, such purchases and sales are of government or very high grade securities. The purchase of securities in the open market has the effect of increasing the quantity of money or credit in the member banks. In the United States purchases are made by checks drawn on the Federal Reserve banks and these checks represent Federal Reserve Bank Credit. These operations, therefore, have the effect of increasing the credit of member banks with the Federal Reserve banks. It can be seen that open market operations are a somewhat more direct means of control. The Federal Reserve banks can take the initiative and control the volume of reserve credit directly. Open market purchases or sales constitute a powerful aid in making effective changes in the discount rates.

The Automatic and Progressive Control of Credit -- Snyder

Carl Snyder, head of the Statistical Department of the New York Federal Reserve Bank, made a suggestion which would end some of the discretionary phases of open market control. He planned to make changes in the discount rate and open market operations a matter of law.

According to his plan, if the price level changed by a certain percentage, the discount rate would also change, automatically. At the same time purchases or sales would be made in the open market. Changes in both the discount rate and in the holdings of securities could be made at a progressively increasing rate as the price level deviated from a previously determined norm. One of the principal criticisms of the Federal Reserve Board has been that action in regard to credit control was not timely. If Snyder's plan were adopted there would be no need of lengthy conferences to decide upon a policy, and business men would know under what circumstances a change in Federal Reserve bank control was to take place.

The plan might be even more sensitive than Snyder would have it. Price-level changes are measured in tenths of one per cent. If the price level dropped one-tenth of one per cent from the normal level, the banks might begin daily buying of an insignificant amount, say $10,000 worth of government securities. As the price level continued to fall, if it did, the volume of purchases would increase progressively, with each one-tenth of one per cent. There would then be no sudden and unexpected change of open-market policy. Every day a purchase or sale would be made the amount of which would

According to his plan, if the price level changed by a certain percentage, the discount rate would also change, automatically. At the same time purchases or sales would be made in the open market. Changes in both the discount rate and in the holdings of securities could be made at a progressively increasing rate as the price level deviated from a previously determined norm. One of the principal criticisms of the Federal Reserve Board has been that action in regard to credit control was not timely. If Snyder's plan were adopted there would be no need of lengthy conferences to decide upon a policy, and business men would know under what circumstances a change in Federal Reserve bank control was to take place.

The plan might be even more sensitive than Snyder would have it. Price-level changes are measured in tenths of one per cent. If the price level dropped one-tenth of one per cent from the normal level, the banks might begin daily buying of an insignificant amount, say $10,000 worth of government securities. As the price level continued to fall, if it did, the volume of purchases would increase progressively, with each one-tenth of one per cent. There would then be no sudden and unexpected change of open-market policy. Every day a purchase or sale would be made the amount of which would

depend upon the deviation from normal. Under the present system, the sudden sweeping changes, the "putting on of the brakes," is more likely to cause crises than to prevent them. Carl Snyder's suggestion is worthy of much consideration, not only because of his authoritative position, but also because it would accomplish what many conflicting plans aim to accomplish. It would take the important function of control of the general credit situation out of the hands of politicians and would relieve financiers of the need of taking a position which is contrary to the trend of popular sentiment. There is no reason why the brakes should not be put on at an incipient stage of a boom.

The banks are expected to "lead the market." They have certainly failed to do so. They have been unwilling to do the unpopular thing at crucial times and they have come under the influence of powerful financiers -- special interests -- who, for private reasons, objected to changes. The greatest indictment against the Federal Reserve banks is their failure to lead the markets out of the very serious slump between 1929 and 1932. Action was postponed until May 1932 and then abandoned a few months later. The public

has always expected the banks to do more than merely stop a crisis or moderate it. The banks can and should prevent booms from developing. Automatic and progressively higher discount rates combined with progressive sales of government securities would end the boom phase of the business cycle; lower rates and purchases of securities would prevent the depressions.

During the spring and summer of 1932, open market purchases of $1,100,000,000 turned the depression into revival. Stocks tripled in value in a few weeks. Why this reflationary policy was abandoned is somewhat of a mystery. Sentiment was so demoralized in the spring of 1932 that even advocates of the policy were surprised at its effectiveness. There can be no doubt that the price level can be raised or lowered to any extent desired by this one device alone. It is merely necessary to buy enough government securities with newly created Federal Reserve credit or with government notes. It is claimed by some that bond buying during depression has little or no effect on the price level. Experience with this device under the most depressed conditions seems to prove that the contrary is the case. If it were true, as some economists argue, that the purchase of government bonds during depression does not affect the price level, then the entire national debt could

has always expected the banks to do more than merely stop a crisis or moderate it. The banks can and should prevent booms from developing. Automatic and progressively higher discount rates combined with progressive sales of government securities would end the boom phase of the business cycle; lower rates and purchases of securities would prevent the depressions.

During the spring and summer of 1932, open market purchases of $1,100,000,000 turned the depression into revival. Stocks tripled in value in a few weeks. Why this reflationary policy was abandoned is somewhat of a mystery. Sentiment was so demoralized in the spring of 1932 that even advocates of the policy were surprised at its effectiveness. There can be no doubt that the price level can be raised or lowered to any extent desired by this one device alone. It is merely necessary to buy enough government securities with newly created Federal Reserve credit or with government notes. It is claimed by some that bond buying during depression has little or no effect on the price level. Experience with this device under the most depressed conditions seems to prove that the contrary is the case. If it were true, as some economists argue, that the purchase of government bonds during depression does not effect the price level, then the entire national debt could

be retired. We are obliged to conclude that the purchase of government securities by the Federal Reserve banks is either inflationary or it is not. If it is not there would be no harm in retiring the government debt; if it is inflationary, then it can be used as an effective reflationary or anti-deflationary device.

<u>The Discovery of "Open Market" Control -- Strong</u>

It was a great calamity that Governor Strong died. Theorists had advocated open market policies long before 1921, but he discovered the practical possibilities and, up to the time of his death, prevented business depression and deflation through this and other credit controls. In all probability, the great business depression of 1929-1936 would not have occurred if he had lived. In 1921, the Federal Reserve banks tried to increase their earning assets. In order to do so they bought securities in the open market. To their very great surprise, the result was the opposite from what they expected. Their profits were reduced. This was because the reserves of the member banks were increased by the open market purchases. This enabled them to curtail the rediscounting of paper with the central banks. At first the reason for the further decrease in profits was not clear to Federal Reserve bank officials. However, when it became clear that reserves

be retired. We are obliged to conclude that the purchase of government securities by the Federal Reserve banks is either inflationary or it is not. If it is not there would be no harm in retiring the government debt; if it is inflationary, then it can be used as an effective reflationary or anti-deflationary device.

The Discovery of "Open Market" Control -- Strong

It was a great calamity that Governor Strong died. Theorists had advocated open market policies long before 1921, but he discovered the practical possibilities and, up to the time of his death, prevented business depression and deflation through this and other credit controls. In all probability, the great business depression of 1929-1932 would not have occurred if he had lived. In 1921, the Federal Reserve banks tried to increase their earning assets. In order to do so they bought securities in the open market. To their very great surprise, the result was the opposite from what they expected. Their profits were reduced. This was because the reserves of the member banks were increased by the open market purchases. This enabled them to curtail the rediscounting of paper with the central banks. At first the reason for the further decrease in profits was not clear to Federal Reserve Bank officials. However, when it became clear that reserves

could be increased or lowered by open market operations, Governor Strong organized the Open Market Committee which, under his guidance, succeeded in stabilizing the price level until the fall of 1929.

The Open Market Committee was officially recognized in the spring of 1923. During that year inflation was prevented by the sale of $525,000,000 of government securities. The sale of these millions of government securities had the effect of reducing the reserves of the member banks, thus forcing them to rediscount more paper at the central banks. This forced rediscounting made the banks less inclined to lend money and the slight deflation of credit brought the price level down. By 1924 a deflationary trend developed and the committee reversed its policy. It bought $510,000,000 of government securities up to September 1924. At the same time the discount rate was reduced from $4\frac{1}{2}$ to 3%. Prices rose and by 1925 had reached a peak which necessitated another reversal of the Federal Reserve Bank's credit control policy. In each of the above cases, prompt action by the Board in making purchases and sales in the open market proved successful in curbing incipient inflation or deflation.

The Change of Reserve Requirements

There are other devices which might be used to supplement changes in the rediscount rates. Under the present system reserve requirements can be changed. A recent doubling of reserve requirements within a few months reduced excess reserves by enormous amounts. Short of 100%, reserves could be raised indefinitely. Manipulation of the reserve requirements in the present system should not be confused with the proposal of 100% reserves. The 100% system would require other important changes, such as the increase of the cash in the banks. Within the present system such drastic changes in reserve requirements should be very infrequent. The objectives could be attained without so much shock to the business world as was experienced in 1937.

"Moral Suasion"

Various appeals by the Federal Reserve Board for caution have an important psychological effect on the markets merely because member banks know that these suggestions are usually followed by action. This is what is meant by "moral suasion." A single bank in the system knows that it is unsafe to ignore the warning of the central bank, not only because action will be taken by the central bank but also because the response of thousands of banks may leave the one bank in a precarious financial position. For instance, if thousands of banks

begin calling loans, as they did in 1920, one bank which may not have heeded the request of the central bank, may find some of its loans frozen as a result of deflation. "Moral suasion" has been used by the Federal Reserve Board in ways that are exceedingly questionable.

The complete success with which the Federal Reserve banks upset the stability of prices in 1929 should never be forgotten and never overlooked when making plans for the future. The success of the Federal Reserve Board on that occasion demonstrates that another agency of the government could control the price level and keep it stable.

begin calling loans, as they did in 1920, one bank which may not have heeded the request of the central bank, may find some of its loans frozen as a result of deflation. "Moral suasion" has been used by the Federal Reserve Board in ways that are exceedingly questionable.

The complete success with which the Federal Reserve banks upset the stability of prices in 1929 should never be forgotten and never overlooked when making plans for the future. The success of the Federal Reserve Board on that occasion demonstrates that another agency of the government could control the price level and keep it stable.

CHAPTER IX

STABILIZATION ATTEMPTS THROUGH EASY MONEY[1]

Probably most important of all recent economic innovations and an integral part of governmental experiments the world over are the changed fiscal policies. Billions for social security added to the costs of past wars and present rearmament programs left governments with literally unbearable fiscal burdens. One way of relieving the burden of these expensive social experiments and a way that treasuries were at first slow to see is a deliberate policy of easy money. However, today treasuries are borrowing at phenominally low rates and apparently intend to continue to do so into the indefinite future. This forced easy money policy is not a local practice by any means, but the accepted common practice of governments. Furthermore, the policy seems to have the blessing of many brilliant writers, among them John Maynard Keynes. Keynes conceives "a somewhat comprehensive socialization of investment" as a means of securing an approximation to full employment. In his "Notes on the Trade Cycle" in his recent book, <u>The General Theory of Employment, Interest, and Money</u>, he states his easy money ideas as follows:

---

1. The chapter was written in July 1937. See footnote relative to reserve requirements, p. 250.

"The remedy for the boom is not a higher rate of interest but a lower rate of interest! For what may enable the so-called boom to last. The right remedy for the trade cycle is not to be found in abolishing booms and thus keeping us permanently in a quasi-slump; but in abolishing slumps and thus keeping us permanently in a quasi-boom. .... An increase in the rate of interest, as a remedy for the state of affairs arising out of a prolonged period of abnormally heavy new investment, belongs to the species of remedy which cures the disease by killing the patient."[1]

The Administration's Dilemma

American monetary authorities have rather belatedly, but enthusiastically, adopted this philosophy of permanently easy money, the idea that it is necessary to fight deflation by cheap money, but not including the old-fashioned notion that it is safe to fight inflation by firm money. However, in its religious pursuit of this philosophy the Administration is experiencing something of a crisis. How to prevent the price level from rising and at the same time adhere to a policy of easy money is indeed a dilemma. A bear market in bonds since January 1937, with the corresponding rise in yields, suggests that this "new era" philosophy of easy money is to become history like much of the economics of the "New Deal" in record-breaking time. Indeed, the long-term peak of the bond market is doubtless history right now.

---

1. The General Theory of Employment, Interest and Money, pp. 322-323.

The Inflation Brakes

If not carried to extremes, or used as a cure for all economic ills, reasonably low money rates have certain great advantages, not only for government treasuries, but also for the social welfare. Historically there never has been a business depression that was not stopped by idle funds.[1] The recent depression was no exception to this rule. Cheap credit forced on the country is a positive recipe for revival. But now that the reflation has "caught," now that the debt burden, both public and private, has been relieved, now that the general solvency of the nation is assured, should we use the brakes to avoid a boom, or is this politically impossible, as many economists have believed all along? Or is Keynes right? Can we have a permanent boom? There are many who believe, with L. E. Pierson, that "a subordinating of most other considerations of monetary policy to that of maintaining easy money is likely to bring considerable difficulties in the long run."[2]

Parties Interested

Pressure for the maintenance of easy money rates is likely to come from unexpected sources. Who

---

1. A Basis for Stability, Samuel Crowther, p. 44.
2. Speech at A.B.A. Graduate School of Banking, L.E. Pierson (Reported in the Commercial and Financial Chronicle, Vo. 145, No. 3759, July 10, 1937.

are the interested parties? The Treasury Department is in the market for funds and refunding. The banks with heavy investments in bonds are nervous lest a reversal of easy money policy deflate the value of their assets before they can be distributed. Commercial banks hold $12,990,000,000 of the government debt.[1] Large investors in bonds are in a similar position with bond markets too soft for them to cut down in any volume. Furthermore, holders of common stocks are well aware that a stock market that has been rallying for two years, walking on easy money stilts as it were, is extremely sensitive to any correction in the bond market. Probably Mr. Eccles knows how to keep all of these groups happy and at the same time prevent the wholesale price level from soaring as it threatened to do a few months ago. Between November 1, 1936 and December 31, 1936, wholesale prices rose 12%.[2]

The President

Maturing obligations of the Government within the next five years will amount to approximately $13,000,000,000. Furthermore, a balanced budget seems to be very far around the corner. Income tax revenues for March 1937 fell $150,000,000 short of expectations. The President does not seem disposed as yet to favor a

1. Slump Ahead in Bonds, Major L.L.B. Angas, p. 25.
2. Ibid., p. 42.

balanced budget, and if he did, doubtless Congress would override his veto in the matter of large expenditures. In spite of all the economy talk, Congress has appropriated more than $7,500,000,000 this year, and a deficiency appropriation for unanticipated expenditures must yet be passed. April 1, the Secretary of the Treasury, Mr. Morgenthau, announced that the Treasury would support the government bond market to the extent of preventing disorderly decline. The Chairman of the Federal Reserve Board, Mr. Eccles, has repeatedly expressed a desire to maintain an easy money policy. It would seem from the expressed desires of Mr. Eccles and the position of the Government in the matter of large-scale financing, that one might certainly expect nothing but an easy money policy from government sources. If that were the case one could gamble heavily on it that we would get easy money. However, Major Angas, an analyst of uncanny foresight, and a friend of the Administration, suggests that an additional 1% on government conversions would result in merely an extra $150,000,000 more per annum on a budget which is over $7,000,000,000. Major Angas believes that this would be a small price to pay in order to prevent a harmful commodity price inflation. The Major goes much further and says:

balanced budget, and if he did, doubtless Congress would override his veto in the matter of large expenditures. In spite of all the economy talk, Congress has appropriated more than $7,500,000,000 this year, and a deficiency appropriation for unanticipated expenditures must yet be passed. April 1, the Secretary of the Treasury, Mr. Morgenthau, announced that the Treasury would support the government bond market to the extent of preventing disorderly decline. The Chairman of the Federal Reserve Board, Mr. Eccles, has repeatedly expressed a desire to maintain an easy money policy. It would seem from the expressed desires of Mr. Eccles and the position of the Government in the matter of large-scale financing, that one might certainly expect nothing but an easy money policy from government sources. If that were the case one could gamble heavily on it that we would get easy money. However, Major Angas, an analyst of uncanny foresight, and a friend of the Administration, suggests that an additional 1% on government conversions would result in merely an extra $130,000,000 more per annum on a budget which is over $7,000,000,000. Major Angas believes that this would be a small price to pay in order to prevent a harmful commodity price inflation. The Major goes much further and says:

> "Indeed, if Machiavelli, instead of Mr. Morganthau, was Manager of the National Debt, it might almost be said that he, ... might become positively anxious for a fall in the bond market (due to high interest rates) so that he could buy back the existing debt at lower levels, out of the proceeds of taxation or with the income derived from Social Insurance."[1]

So, in spite of all that has been said by our monetary authorities, particularly by Mr. Eccles, in the matter of easy money, it is not at all certain that they may not find it to the interest of their various offices to change their minds.

The Treasury and the Federal Reserve Board

An apparent conflict between the Treasury Department and the Federal Reserve Board would arise if it were not for the abandonment of classical theories of interest rates. Cheap government financing would conflict with what used to be considered a need for firmer interest rates. As it is now, even the interests of the member banks are in some ways in harmony with the policy of the monetary authorities and in some ways not. Commercial banks hold $12,990,000,000 of the government debt, or did, on June 30, 1936. A rise in interest rates means a decline in the market value of these holdings. On the other hand, the chief business of the banks is, or

---

1. Slump Ahead in Bonds, Major L.L.B. Angas, p. 18.

was, not the business of investing in government debt, but rather the lending of money and credit. Whether the banks stand to lose or gain on balance by a change in the long-term yield on bonds is a matter of arithmetic. The following table is interesting in this connection:

TABLE VIII

Who Holds the Government Debt[a]
(June 30, 1936)

Investors	Billions	Per Cent of Total
Commercial Banks	12.99	38.9
Savings Banks	1.85	5.5
Postal Savings	.80	2.3
12 Federal Reserve Banks	2.43	7.2
Government Agencies	1.48	4.4
49 Life Insurance Companies	3.55	10.6
Veteran's Adjusted Service Bonds	.71	2.1
Private Trust Funds and Individuals	9.74	29.0
	33.55	100

(a) Slump Ahead in Bonds, Major L.L.B. Angas, p. 25.

The banks seem to be between the devil and the deep blue sea. As Major Angas points out, "the banks hold about $14,000,000,000 of long-term bonds. Consequently, a 10% decline in such bonds (due to a rise in long-term interest rates) might imply a depreciation of nearly $1,400,000,000 in assets."[1] On the

1. Slump Ahead in Bonds, Major L.L.B. Angas, p. 36.

other hand, unless long-term interest rates do rise other interest rates certainly will not, and it is doubtful that commercial banks can meet the costs of performing the usual banking services and make a profit. Are we undermining the banking structure of the country? It cannot be overemphasized that local bankers, like the general public, are victims of much of the financial juggling of recent years. Certainly the local banker whose business was the granting and investigating of local loans knew little of what was behind the privately managed credit deflation of 1929-30-31-32-33. With the rest of us he has reason to desire the liquidation of giant financial pirates.

However, there is a tendency to assume that commercial banks and other investors all bought securities at the top of the market and that they are wronged in some way if anything is done to prevent them from getting out. No one advances this theory, but it certainly is implied. Relatively few paid the top price for either bonds or stocks. Holders of common stocks are, however, well aware that the two-year rally in the stock market that ended in March was due to easy money and that the stock market is bound to be very sensitive to correction in bond prices and bond yields. If the Government finds it necessary or expedient to let the market for government bonds down by easy stages,

other hand, unless long-term interest rates do rise other interest rates certainly will not, and it is doubtful that commercial banks can meet the costs of performing the usual banking services and make a profit. Are we undermining the banking structure of the country? It cannot be overemphasized that local bankers, like the general public, are victims of much of the financial juggling of recent years. Certainly the local banker whose business was the granting and investigating of local loans knew little of what was behind the privately managed credit deflation of 1929-30-31-32-33. With the rest of us he has reason to desire the liquidation of giant financial pirates.

However, there is a tendency to assume that commercial banks and other investors all bought securities at the top of the market and that they are wronged in some way if anything is done to prevent them from getting out. No one advances this theory, but it certainly is implied. Relatively few paid the top price for either bonds or stocks. Holders of common stocks are, however, well aware that the two-year rally in the stock market that ended in March was due to easy money and that the stock market is bound to be very sensitive to correction in bond prices and bond yields. If the Government finds it necessary or expedient to let the market for government bonds down by easy stages,

stock prices will certainly resume the downward trend by somewhat less easy stages. Those who have been bearish on the market for months and who are still standing by with one eye on Mr. Eccles can be dispassionate about this. There is a tendency for persons who are long in the market to be a little bitter about it. Most speculators, and many investors, feel about the social welfare in the way so admirably expressed by Commodore Vanderbilt: "The public be damned." In fact, it is very difficult to think straight on any of these questions unless one is on the sidelines, and very few are.

The Public

The interests of the public, as represented by the opinions of their representatives in Congress, should be mentioned -- merely as a theoretical matter. The Roosevelt Dynasty has so successfully set aside any tampering with the Administration's monetary policy that any interference by Congress, apart from the making of appropriations, is hardly to be considered as a practical matter. The Thomas Amendment is an example of what is likely to happen when Congress takes a direct hand in such matters. The issuing of $3,000,000,000 of United States currency was made discretionary with the President and he merely forgot about it. The measure, as a mandatory measure, simply could not have been passed.

stock prices will certainly resume the downward trend by somewhat less easy stages. Those who have been bearish on the market for months and who are still standing by with one eye on Mr. Eccles can be dispassionate about this. There is a tendency for persons who are long in the market to be a little bitter about it. Most speculators, and many investors, feel about the social welfare in the way so admirably expressed by Commodore Vanderbilt: "The public be damned." In fact, it is very difficult to think straight on any of these questions unless one is on the sidelines, and very few are.

The Public

The interests of the public, as represented by the opinions of their representatives in Congress, should be mentioned -- merely as a theoretical matter. The Roosevelt Dynasty has so successfully set aside any tampering with the administration's monetary policy that any interference by Congress, apart from the making of appropriations, is hardly to be considered as a practical matter. The Thomas Amendment is an example of what is likely to happen when Congress takes a direct hand in such matters. The issuing of $3,000,000,000 of United States currency was made discretionary with the President and he merely forgot about it. The measure, as a mandatory measure, simply could not have been passed.

The Shifting of Power from
New York to Washington

The responsibility for managing the currency and credit is very definitely in Washington. It is comforting to realize that the financial oligarchy that directed the deflation of 1929-32 is no longer in control. Nevertheless, unparalleled power has been concentrated in the hands of a few representatives of a political party, whose general program has at times proved hasty and rash. Furthermore, there seems to be a reluctance to disclose the rules. Forecasting has become almost wholly a matter of guessing what is in the minds of Mr. Roosevelt and Mr. Eccles. Why cannot the rules be made public? Why not put the cards on the table? Why keep the nation in the dark as to the fiscal program? Why all the secrecy about stabilization and monetary management? A speech by Mr. Eccles is likely to change values on the Stock Exchange in billions of dollars. This has actually happened during the past few months, in the spring of 1937. Yet no one knows the rules.

Whimsical Policy

While it is known that the monetary authority can, or could, raise the reserve requirements 100%, or that the twelve Federal Reserve banks can sell the

$2,526,190,000[1] holdings of government bonds, no one knows when or under what conditions these things are likely to take place. It is also known that the monetary authority has almost unlimited additional powers, but it is not known under what conditions these financial dictators are likely to make some world-shaking decision. The one thing that we are sure of is that inflation or deflation, in large or small doses, can be turned on and off at will. Those who realize the importance of such power hope that it will be used wisely. An independent monetary authority is more important than an independent judiciary. There is some hope now of retaining the latter, but not much hope of attaining the former.

<u>Passing of the Business Cycle, Angas</u>

In spite of the uncertainty engendered by our whimsical monetary authority there is already some talk of another "new era." A belief in a perpetuation of business prosperity through permanent easy money. Major Angas, the man who has been consistently right for a period of ten years, has the following to say:

> "I believe that the worst features of the business -- or rather the bank credit cycle, will henceforth be eliminated from the American economy. I believe that the recent inflation scare is nonsense -- in view of the existence of the Monetary Control. I believe that if demand becomes

1. Commercial and Financial Chronicle, Vol. 145, No. 3759, July 10, 1937.

> wild, owing to increased velocity, it will be held in check by the iron hand of Eccles, despite the opprobrium which will (foolishly) be heaped on his head."[1]

It should be noted that the hard-headed Major Angas is not relying on a system or a theory, but on the iron hand of Mr. Eccles.

Analysis of current money problems should not be prejudiced by mistrust of the Administration. Even legitimate mistrust of the persons who are important in government financial circles may lead to one-sided inquiry. After all, much has been accomplished, and many of the fears of the past four years have proved as yet unfounded. One may overlook either the dangers on the one hand or some of the factors which limit the possibilities of inflation.

Social Security and Government Speculation

The Social Security Act provides that the funds collected under the Old Age Annuity Plan shall be invested in bonds paying not less than 3%. Apparently there will eventually be huge sums of Social Security Tax money available, exclusively for purchases of government bonds. Is the Government, or various authorities under the Administration going to speculate in their own bonds? If the Government profits

---

1. Slump Ahead in Bonds, Major L.L.B. Angas, p. 57.

greatly by a fall in the bond market, which seems to be inevitable, it may be due to a sincere policy of stabilization, but there will doubtless be a storm of criticism. Major Angas has pointed out in another connection that a 1% change in long-term interest rates means approximately a 10% decline in the market value of the average mixed bond portfolio. It is a certainty that the average mixed bond portfolio will follow the government bond market. One would not want to suggest that the common people's government is rigging the bond market so as to ensnare the bankers. The fact still remains that we have had one of the greatest bull markets in bonds of all time. The Government had a lot to do with it, and apparently the Government is going to buy in, through the Social Security Authority, a lot of those bonds at lower levels. Doubtless much of the Government bonds held by the banks and others were purchased far below peak levels. Much of the New Deal financing has been through short-term paper and not through long-term bonds at all. The picture can be overdrawn.

<u>The Government's Influence on the Markets</u>

What will be done about the funds collected as Social Security Income Taxes? Who will manage these funds and from whom will bonds be purchased? It is estimated that by 1950 the reserves will amount to

$18,500,000,000, and by 1980 they will reach an estimated peak of $50,000,000,000.[1] The collection of these funds is deflationary, as purchasing power is reduced by the amount collected. On the other hand, open market purchases of bonds with the proceeds of the Social Security Income Tax is inflationary. Therefore, it would seem that the net inflation-deflation effect would be zero. As yet the funds collected have not been invested, probably because there are no government bonds yielding 3% available. Or it may be that officials realize that a decline in the bond market of a few points may more than offset any loss of interest incurred by waiting. It would be better to forego the interest for three years than to take a loss of ten per cent in the market price of a bond, and many financial writers have been pointing out for months that a big decline in the bond market is almost a certainty -- because of prospective government action. As a matter of fact, the average of 40 bonds, according to the Wall Street Journal, July 14, 1937, has declined over 5 points in six months. United States Government bonds, according to Moody's index, declined 5.71 points in three months from January 2, 1937 to April 3, 1937. Naturally, under present methods of government financing, government authorities

---

1. Business and Government, Rohlfind, Carter, and West, p. 567.

know much more about coming trends in the security markets than do outside investors. It is probably not fair to say that government authorities make those trends to take advantage of the public. However, under the present setup, the Treasury Department and the Federal Reserve Board can and probably do determine the time and extent of movements in the government bond market and, as a consequence, movements in other markets.

Social Security and "Open Market" Control

It has been suggested that the credit control operations of the Federal Open Market Committee will be nullified by the purchases of the Social Security Authority.[1] Control of the retail price level is the main objective of open-market control. If the present plan is carried out, about $1,800,000,000 a year of continuous purchases by the Social Security Authority will so absorb government securities that the Federal Reserve banks will have no government securities to sell for price control purposes or for any other reason. Since open-market control is largely a matter of buying and selling government securities, and since eventually there would be no government securities not held by the Social Security Authority, open-market control of the price level would have to be

---

1. Business and Government, Rohlfing, Carter, and West, p. 568.

know much more about coming trends in the security markets than do outside investors. It is probably not fair to say that government authorities make those trends to take advantage of the public. However, under the present setup, the Treasury Department and the Federal Reserve Board can and probably do determine the time and extent of movements in the government bond market and, as a consequence, movements in other markets.

Social Security and "Open Market" Control

It has been suggested that the credit control operations of the Federal Open Market Committee will be nullified by the purposes of the Social Security Authority.[1] Control of the retail price level is the main objective of open-market control. If the present plan is carried out, about $1,800,000,000 a year of continuous purchases by the Social Security Authority will so absorb government securities that the Federal Reserve banks will have no government securities to sell for price control purposes or for any other reason. Since open-market control is largely a matter of buying and selling government securities, and since eventually there would be no government securities not held by the Social Security Authority, open-market control of the price level would have to be

1. Business and Government, Rohlfing, Carter, and West, p. 568.

through the sale and purchase of non-government securities, or not at all. Open-market control, when used properly, has been very effective. However, we can hardly suppose that an outstanding public debt is a necessity. There are other methods, many other methods, of controlling the price level, if monetary authorities really want to accomplish this.

Probability of Inflation

Inflation, according to many, is a certainty in about three years. In 1934, inflation was a certainty in about three years. This reminds one of the periodic predictions as to the exhaustion of our oil resources, which seems always to be fifteen years away. But tomorrow never comes. It may be that real inflation is a greater danger than at any time since the beginning of the business revival. However, we hear less about it. A few years ago Professor Kemmerer and other highly accredited monetary authorities, forecast inflation of the wildest kind. At a lecture in Woolsey Hall in New Haven, sponsored by the Crusaders, Professor Kemmerer compared our Government's method of raising funds with that of Germany during the inflation period, and said that the methods were identical -- that both governments backed new issues of currency by bonds and that the sky was the limit. The retail price index of the United

States Bureau of Labor Statistics is still thirteen per cent below the average for recent years, thirteen per cent below 1926 levels. Professor Kemmerer seems to have guessed wrong. As recently reported, Professor Kemmerer still believes that there are powerful inflationary forces about which he comments as follows:

> "We hear much about 'controlled' inflation as if inflationary forces could be turned on and off by the Government at will. The world's experience with inflation, however, as every student of monetary history knows, shows that inflation, when it once gets well started, is one of the hardest things in the world to control. There have been many cases in history in which for substantial periods of time -- in some cases running into years -- inflation was moderately well controlled as it is being controlled today in England and Sweden, but never, so far as I know, has an inconvertible paper money standard been an enduring success. Sooner or later it always breaks down under political pressure and usually with disastrous results. Certainly conditions in our own country are extremely unfavorable for the success of grandiose experiments in controlled inflation."[1]

Excess Reserves

Mathematically it could be shown that an inflationary pyramid of credit could be built up on the existing quantity of reserves. Recently, before steps had been taken partially to correct the situation, excess reserves amounted to over $3,000,000,000. Not only that, but potential reserves that could have

---

1. The Commercial and Financial Chronicle, Vol. 145, No. 3758, July 3, 1937, p. 43.

been built up gave sensitive souls the jitters. It is necessary merely to mention that member banks had, and still have, the privilege of discounting government bonds with the Federal Reserve banks. That is, they have the privilege of borrowing 100% against government bonds. And the resulting credits with the Federal Reserve banks would be reserves -- billions more! That is only part of that story. However, as a practical matter, there never has been a time when these reserves could have been used. There never has been a time when the huge credits that Professor Kemmerer imagined a few years ago could have been built up. And why? Merely that both custom and law do not permit banks to impair their capital by too excessive deposits in relation to their capital structures. If it were true that reserves on a 10 to 1 basis were the only limiting factor, an inflationary credit expansion would be almost a certainty. However, as a matter of common sense, banks have been careful of their capital-deposit ratios. Some of them have been ultra-conservative, many holding to a position of keeping a capital ratio of about five to one. Furthermore, if some banks are not disposed to do so, the Federal Deposit Insurance Corporation requires,

been built up gave sensitive souls the jitters. It is necessary merely to mention that member banks had, and still have, the privilege of discounting government bonds with the Federal Reserve banks. That is, they have the privilege of borrowing 100% against government bonds. And the resulting credits with the Federal Reserve banks would be reserves -- billions more! That is only part of that story. However, as a practical matter, there never has been a time when these reserves could have been used. There never has been a time when the huge credits that Professor Kemmerer imagined a few years ago could have been built up. And why? Merely that both custom and law do not permit banks to impair their capital by too excessive deposits in relation to their capital structures. If it were true that reserves on a 10 to 1 basis were the only limiting factor, an inflationary credit expansion would be almost a certainty. However, as a matter of common sense, banks have been careful of their capital-deposit ratios. Some of them have been ultra-conservative, many holding to a position of keeping a capital ratio of about five to one. Furthermore, if some banks are not disposed to do so, the Federal Deposit Insurance Corporation requires,

in admitting banks to insurance, that no bank shall be operated without a net sound capital equal to at least 10% of its deposits.[1]

Capital Ratio

How then is it that bank deposits have increased to an all time peak? How is it that deposits by 1936 were rebuilt by the amount of $16,000,000,000? And to what extent can this trend continue? Professor Edie points out that at the previous peak banks had capital equal to about 14% of deposits, and that capital assets today are about $1,600,000,000 below the previous peak. He points out further that deposits are over the peak and that consequently capital assets are about 13% of deposits, the ratio being more strained than it ever has been in the past. It seems to me that persons who are bullish on the various markets because of supposed inflationary possibilities might well ponder the following quotation from "Easy Money:"

> "By 1936, at the end of the rebuilding process, the capital ratio was stretched as far as it should be. It is a very different matter to build on another $16,000,000,000 of deposits. The first stage was one of reconstruction. That stage has been completed. The capital ratio is at the saturation point. It did not restrain the rebuilding process, but it will restrain future expansion."[2]

---

1. Easy Money, Lionel D. Edie, p. 99. (Adapted)
2. Ibid., p. 102.

Character of Bank Assets

In this connection it should be noted that the character of bank assets, being to a much larger extent than formerly, investments, there may be a desire on the part of bankers to shift to shorter term investments. This may be a slow process at times, and, at others, a rather rapid adjustment. This kind of liquidation is not likely to have an inflationary effect on the security markets. There have been long bear markets in the face of above-normal business conditions in the past, and it can happen again. Many feel that the bearish tendency in the market for some months past is of secondary importance. However, the movement has about it the important characteristic of major bear markets in stocks. There is a congestion of securities in the hands of a group of bankers who need to sell. Will the market be marked up in the face of this condition or will it be allowed to fall of its own weight?

Long-term Probability of Inflation

Few financial writers expect inflation in the near future. What may happen if the Government does not successfully cut down the huge public debt before the next depression comes, is a somewhat longer

Character of Bank Assets

In this connection it should be noted that the character of bank assets, being to a much larger extent than formerly, investments, there may be a desire on the part of bankers to shift to shorter term investments. This may be a slow process at times, and, at others, a rather rapid adjustment. This kind of liquidation is not likely to have an inflationary effect on the security markets. There have been long bear markets in the face of above-normal business conditions in the past, and it can happen again. Many feel that the bearish tendency in the market for some months past is of secondary importance. However, the movement has about it the important characteristic of major bear markets in stocks. There is a congestion of securities in the hands of a group of bankers who need to sell. Will the market be marked up in the face of this condition or will it be allowed to fall of its own weight?

Long-term Probability of Inflation

Few financial writers expect inflation in the near future. What may happen if the Government does not successfully cut down the huge public debt before the next depression comes, is a somewhat longer

time question than most writers care to wrestle with. The Roosevelt administration has succeeded in reflating credit. By the injection of bank credit, borrowed from, and created by the banks, into public circulation, spent in the form of public works, etc., the administration has created plentiful credit. Gold stocks, reserves, and demand deposits, all increased enormously. Current increases in deposits are due to conventional granting of loans; that is, real demand, rather than the government's financing of budget deficits. This is further evidence that the reflation has "caught." Until recently, however, confidence, as indicated by the velocity of turnover of bank deposits outside New York, was slow to recover. With an incipient revival of velocity, which began to appear last year, the great quantities of bank deposits became a potential danger. This potential danger doubtless caused needless worry.

Deflationary Measures

During the past year the Government has progressively taken steps to prevent the inflation which seemed to be about to take place as a result of the reflationary measures of the preceding four years. The rapid rise in the wholesale commodity index in the latter half of 1936 was the warning that the brakes had to be applied if the incipient boom was to be

controlled. By the middle of March, 1937, there had been a continuous two-year rally in the common stock market and, to January 1937, there was also the greatest bull market in bonds of all time. The current corrections in the security markets are obviously a direct result of the steps taken by the Government to prevent a rise in commodity prices.

Some of the controls available to the Administration under existing law were used. Federal Reserve requirements were increased 50% in August 1936. There was another increase of 33 1/3%, one-half to become effective March 1, 1937, and the other half May 1, 1937. Now required reserve ratios are 26%, 20%, and 14%, for demand deposits.[1] With these increases the Administration has reached the limit permissible under the law, and there are still excess reserves which continue to grow. July 7, 1937, excess reserves had again risen to $880,000,000. Raising the reserve requirements had the effect of warning the financial world of a disposition on the part of the Government to take steps of an anti-inflationary nature. Markets responded accordingly and for the present at least immediate fears of inflation are allayed. The reduction of excess reserves was not merely a psychological factor in the financial picture, however. In order to meet the new reserve

---

1. Since this chapter was written in July 1937 there has been a reversal of policy and a reduction of reserve requirements. See pp. 277-278.

controlled. By the middle of March, 1937, there had been a continuous two-year rally in the common stock market and, to January 1937, there was also the greatest bull market in bonds of all time. The current corrections in the security markets are obviously a direct result of the steps taken by the Government to prevent a rise in commodity prices.

Some of the controls available to the Administration under existing law were used. Federal Reserve requirements were increased 50% in August 1936. There was another increase of 33 1/3%, one-half to become effective March 1, 1937, and the other half May 1, 1937. Now required reserve ratios are 26%, 20%, and 14%, for demand deposits.[1] With these increases the Administration has reached the limit permissible under the law, and there are still excess reserves which continue to grow. July 7, 1937, excess reserves had again risen to $880,000,000. Raising the reserve requirements had the effect of warning the financial world of a disposition on the part of the Government to take steps of an anti-inflationary nature. Markets responded accordingly and for the present at least immediate fears of inflation are allayed. The reduction of excess reserves was not merely a psychological factor in the financial picture, however. In order to meet the new reserve

---

1. Since this chapter was written in July 1937 there has been a reversal of policy and a reduction of reserve requirements. See pp. 277-278.

requirement, banks were compelled to sell bonds and other investments. The financial and psychological effect of the steps taken by the Government has been adequate for the present. There should be no doubt as to the powers of the Government, either of an inflationary or a deflationary nature. For instance, open-market sale of about one-third of the $2,526,190,000 government debt held by the Federal Reserve banks would reduce excess reserves to zero.

There are many other things that the Government could do. For example, the Administration could obtain from Congress additional legal powers for increases of the reserve requirements. If there is the great danger in excess reserves that some seem to think, why leave the required reserves at 26%, 20%, and 14%? There is a lot of room for improvement short of the 100% reserves desired by Professor Fisher.

A Balanced Budget

Eventually the Government should cease borrowing from the banks. Borrowing from the public is not inflationary. In time, nevertheless, the federal budget will be balanced. Mr. Eccles courageously suggested a few months ago that taxes should be increased. Taxes are deflationary, and government

expenditures financed by taxes are not inflationary. When business revival and prosperity are a little more assured, the Government will, or should, begin to retire the government debt. The nation cannot feel secure until this process of debt reduction begins. There is a great deal of faith among responsible forecasters that there is going to be great improvement, that the national income is going to rise. If they are right it should not be difficult for the nation to raise the sums necessary to retire the debt. Furthermore, this will be anti-inflationary in a very healthy way. Also, it will place the nation in condition to borrow safely when and if another depression comes. If it becomes politically impossible to reduce the debt, future emergency spending will inevitable cause inflation of a very grave nature.

The Flow of Gold to the United States

Meanwhile, a continuous flow of gold to the United States has added to the woes of the monetary authorities. The causes of this unusual movement are traceable to the devaluation of the dollar, which resulted in releases from Indian hoards and mercantile gold, the impounding of gold here, the Soviet shipments, the dehoarding of European gold and large foreign investments in American securities. All of which leaves

our government holding monetary stocks of gold on July 10, 1937, of $12,376,000,000,[1] which is well over half of the world's monetary supply. This amount represents an increase of over $5,000,000,000 in three years and an increase of $1,754,000,000 in the past year. In order partially to offset the inflationary effect of this steady inflow of gold, the Government is currently absorbing all fresh receipts in its "inactive" gold fund which now is running toward the $1,200,000,000 mark. The Treasury borrows the money with which to purchase the gold, thus preventing an increase in member bank reserves. This is, however, only a partial "sterilization" as there is still an increase in member bank deposits.[2] The settlement of the gold question is not of particular urgency in the United States at the present time. The difficulties of France in maintaining her stock of gold is not so important as an international matter as is sometimes feared. France holds rather a minor position in international commodity markets. Our local question, the matter of "sterilization" of gold through borrowed money, does seem needless and other anti-inflationary measures might be used but the expense of the present

---

1. New York Times, July 11, 1937.
2. Slump Ahead in Bonds, Major L.L.B. Angas, p. 25.

procedure is not so great with the present low rates paid by our Government for short-term loans. It may be just as well to let this gold question wait until a more certain course can be decided upon. As the Secretary of the Treasury suggests: "We may lose our shirts."

Meanwhile, the inactive gold fund constitutes an excellent buffer in case foreign investors decide to withdraw investment funds or if much of the gold funds sent from France prove to be but temporary deposits here. It is estimated that foreign investors hold about \$5,000,000,000 of American securities, \$2,000,000,000 of which are in common stocks. The inactive gold fund could take care of a withdrawal of over twenty per cent of this without affecting bank reserves at all. So it would seem that American investment markets are in some ways rather well insulated from shock. Whether over a billion dollars moves out of the "inactive" fund, or remains, is not of vital concern to anyone here.

Foreign Investors

The possible decision on the part of foreign investors to cut down investments in American securities may be speeded by some action taken by our government. The Annual Report of the Board of Governors of the Federal Reserve System, submitted to Congress

June 23, 1937, indicates that action is being considered in the form of an increase in the withholding tax on incomes received by non-resident aliens from American investments. The purpose of this tax, if applied, is only incidentally for revenue. Its main purpose is as a deterrent to the embarrassing inflow of capital. As the Board of Governors pointed out:

> "During the six weeks from the latter part of September until the middle of November foreign investments in American securities were at four or five times the rate prevailing in the first quarters of the year. Announcement in November that measures were being considered which would make American investment less attractive to foreigners, together with a slowing down of the stock market advance, contributed to a decrease in the movement, but at the end of the year foreign purchases of American securities were proceeding on or about the same scale as during the first nine months of 1936."[1]

French Financial Crisis

As yet the French financial crisis has caused hardly a ripple in American financial circles. Trends are undisturbed. However, the franc, the pound, and the dollar have been allowed to find a level around their previous parity. This fact coupled with the lack of disturbance in the recent French

---

1. Annual Report of Board of Governors of Federal Reserve System, submitted to Congress June 23, 1937; cited in Commercial and Financial Chronicle, Vol. 144-2, June 26, 1937.

adjustments may be interpreted as indicating important understandings between our government and the French and English governments. Recently £200,000,000 was added to the British stabilization fund. Again, however, we are very much in the dark. Except for a few brief statements as to the equalization funds nothing is said as to the more fundamental objectives. Doubtless we are moving toward international stabilization as well as stabilization of the domestic price level. It was hoped that the French devaluation would reverse the flow of gold and that funds would return to France. At the time of the 1928 stabilization of the franc the gold flow was reversed. It may be a little early to draw conclusions, but in the week ending July 10, gold shipments (imports) in New York amounted to $28,357,100, indicating renewed nervousness in France, apparently due to heavy increases in taxation.

Dehoarding

The problem of embarrassment of gold may be partially corrected in another way. That dehoarding is likely to slow down is clear from the following analysis of the situation made by the National City Bank of New York:

"How much gold disappeared into private holdings in Western Europe during the depression can be ascertained only in round figures because of fragmentary information on certain gold movements, particularly the holdings of the various stabilization funds, and on the supply of old gold. However, a simple month-to-month comparison of available information on the supply and demand for gold between the end of 1930 and the end of September, 1936, indicates that nearly $3,000,000,000 disappeared or was unaccounted for during that period. The rapid movement of this gold back into monetary stocks dates from the revaluation of the gold bloc currencies last September. The disclosed gold reserves of 52 central banks and governments increased by $2,261,000,000 during the past nine months. As only $937,000,000 of this increase can be accounted for by newly-mined gold, outside of the Soviet Union, and by the shipments from the Soviet Union and the Far East, it follows that the gold received from undisclosed sources has exceeded $1,300,000,000. The amount still held in private hands is therefore but a small fraction of the total formerly unaccounted for and doubtless well under $500,000,000. Thus at the present rate the dehoarding movement will soon expend itself."[1]

Panic in the Gold Market

Recently a panic developed in the gold markets abroad due to a rumor that the American Government was going to revalue gold. Events more recently and pronouncements of American monetary authorities seem to indicate that no such revaluation is to take place. The belief prevails, that while gold at $35.00 an ounce is priced too high, that the adjustments necessary should be accomplished by some other means. It is feared that the international panic which might result

1. Bulletin of the National City Bank of New York, July 1937.

from another revaluation would do more harm than any local benefit could offset.

Rising costs of producing gold are likely to reduce the quantities that are being mined. Furthermore, other countries than the United States and Great Britain may begin to absorb gold in the near future. It is still a rather acceptable commodity.

There is a great deal of mystery about the huge quantities of gold that came from Soviet Russia. Mining engineers pointed out that such quantities could not have been produced from new mines. One guess is that the gold came from Madrid by way of Moscow.

There has been much talk, very foolish talk, about the complete "sterilization" of gold, and the prohibition of gold imports. Fortunately, there is little or no likelihood that this will be done. Such a move might so upset foreign exchange markets as to materially retard world recovery not to mention difficulties that would be created in the matter of arriving at any agreement in international stabilization. Furthermore, it is not entirely against the rules to inject a little sportsmanship into our international dealings. Under present circumstances a rich nation like the United States can well afford to pay the relatively small amount that it is costing to absorb the gold that is flowing in. And

gold is not such a bad commodity to have around. Until recently the world was crying for it. It is still the most widely acceptable commodity in the world. It is to be hoped that our liberal-spending Administration will not get picayune in this matter.

Administration Committed to "Easy Money"

We may summarize by saying that we are definitely committed to an easy-money policy in a managed currency system, whether we like it or not; that we are sure to get "easy money" only insofar as our present highly concentrated money authority can accomplish this without permitting a rise in the price level; that we are likely to be kept in the dark about important coming changes in policy, both of a national and international nature; that inflation is not to be expected in the near future, but may be an important consideration in the long run, if budget deficits are not corrected before the next depression; that there are many means of control available to the Administration; and that the current gold inflow is not of vital concern. The far-reaching power of the Administration in the matter of monetary management should work out to the best interests of the country in the short

gold is not such a bad commodity to have around. Until recently the world was crying for it. It is still the most widely acceptable commodity in the world. It is to be hoped that our liberal-spending Administration will not get ployume in this matter.

Administration Committed to "Easy Money"

We may summarize by saying that we are definitely committed to an easy-money policy in a managed currency system, whether we like it or not; that we are sure to get "easy money" only insofar as our present highly concentrated money authority can accomplish this without permitting a rise in the price level; that we are likely to be kept in the dark about important coming changes in policy, both of a national and international nature; that inflation is not to be expected in the near future, but may be an important consideration in the long run, if budget deficits are not corrected before the next depression; that there are many means of control available to the Administration; and that the current gold inflow is not of vital concern. The far-reaching power of the Administration in the matter of monetary management should work out to the best interests of the country in the short

run, but over a longer period monetary authority independent of both the banks and the Administration is more vital to the nation than is an independent Supreme Court.

CHAPTER X

SUMMARY

There are no problems more widely or more vehemently debated today that those of monetary stabilization and the relation of stabilization to scarcity. Scores of the leading economists, bankers, and statesmen of every important country in the world have made these twin problems their principal concerns. Even scientists,[1] have dropped their science to take up the fight. A former Chancellor of the British Exchequer (McKenna), Ministers of Finance (Havenga and others), presidents of great banking houses of London and New York (Vanderlip and McKenna), world-famous statisticians (Hawtry and Snyder), statesmen (Lord Vernon and Viscount D'Abernon), a labor leader (Meeker), manufacturers (Ford and Rand), a merchant (Filene), an engineer (Kitson), a gold miner (Sir Henry Strakosch), senators (Owen and others), historians (Wells and DelMar), university commissions, and a hundred British leaders in various fields, have all made notable contributions to the literature of stable money. As a result, unprecedented monetary and economic changes are taking place, and may ultimately bring about a fundamental transition to more honest banking.

---

1. Soddy, Nobel Laureate for Chemistry (1921).

CHAPTER X

SUMMARY

There are no problems more widely or more vehemently debated today than those of monetary stabilization and the relation of stabilization to society. Scores of the leading economists, bankers, and statesmen of every important country in the world have made these twin problems their principal concerns. Even scientists,[1] have dropped their science to take up the fight. A former Chancellor of the British Exchequer (McKenna), Ministers of Finance (Havenga and others), presidents of great banking houses of London and New York (Vanderlip and McKenna), world-famous statisticians (Hawtry and Snyder), statesmen (Lord Vernon and Viscount D'Abernon), a labor leader (Meeker), manufacturers (Ford and Rand), a merchant (Filene), an engineer (Kitson), a gold miner (Sir Henry Strakosch), senators (Owen and others), historians (Wells and DelMar), university commissions, and a hundred British leaders in various fields, have all made notable contributions to the literature of stable money. As a result, unprecedented monetary and economic changes are taking place, and may ultimately bring about a fundamental transition to more honest banking.

---

1. Soddy, Nobel Laureate for Chemistry (1921).

The Futility of Non-monetary Reform

For over a century every political and economic reform designed to insure economic security has proved futile because the most vital financial problem of modern times -- the stabilization of the monetary unit -- has not been solved. It is no exaggeration to say that other economic reforms are utterly useless until the condition of the instability of money is corrected. Consider, for instance, the futility of the struggle for increased wages, when the wage earner is subtly robbed of his job and his wages by a systematic unsettling of the price level. The worker would do better to stop deluding himself and to accept some form of wage slavery with more grace. He might at least enjoy a philosophical peace with an Oriental fatalism. One thing is certain: the future holds, for a growing population, no hope other than that of recurring periods of misery and social insecurity, unless and until prosperity is no longer sabotaged by artificial restrictions of the quantity of money and credit. On the other hand, if an honest and scientific money system is created, little else in the way of government control will be needed. Some professional politicians might lose their jobs, but ordinary citizens would be free to follow their chosen employment without concerning themselves excessively with a meddlesome government.

The Futility of Non-monetary Reform

For over a century every political and economic reform designed to insure economic security has proved futile because the most vital financial problem of modern times -- the stabilization of the monetary unit -- has not been solved. It is no exaggeration to say that other economic reforms are utterly useless until the condition of the instability of money is corrected. Consider, for instance, the futility of the struggle for increased wages, when the wage earner is subtly robbed of his job and his wages by a systematic unsettling of the price level. The worker would do better to stop deluding himself and to accept some form of wage slavery with more grace. He might at least enjoy a philosophical peace with an Oriental fatalism. One thing is certain: the future holds, for a growing population, no hope other than that of recurring periods of misery and social insecurity, unless and until prosperity is no longer sabotaged by artificial restrictions of the quantity of money and credit. On the other hand, if an honest and scientific money system is created, little else in the way of government control will be needed. Some professional politicians might lose their jobs, but ordinary citizens would be free to follow their chosen employment without concerning themselves excessively with a meddlesome government.

Social Science vs. Physical Science

The scientist and the engineer are doing their part in solving the physical problems of production. The social scientist, on the other hand, has not been successful in dealing with these matters. No system has been invented which makes it possible to pass on to the public the benefits of astounding technical improvements in industry. Social scientists point out that economic systems involve human beings and, since people cannot be treated like guinea pigs, social experimentation cannot progress rapidly. But economic systems also involve inhuman beings -- vested interests which obstruct the most desirable reforms. Such interests are those which profit by scarcity, which see nothing alarming in the fall of construction, for example, to 20% of capacity, while a large segment of our youthful population seeks shelter in "jungles" or under fish piers. But, as the socialists point out, those in control of our capitalistic society, are concerned with making money, not with making goods. Their experiments are concerned with the creation of vast concentrations of wealth and with the acquisition of far-reaching financial power. Primitive society produced goods nearly to the limit of capacity, a trick we might not find so difficult if we could eliminate the inhuman beings.

A hundred and fifty years ago scarcity was understandable. Man, with little more than his hand labor, was obliged to struggle with the forces of nature to enjoy life and liberty, while in pursuit of a bare subsistence. However, with the possibilities of abundance existing today, and the experience of the years preceding 1929, it will take more than oratory replete with references to "sound money" and "rugged individualism" to convince the American people that they cannot produce enough to feed, clothe, and shelter the nation in 1938.

The United States, with about 6% of the world's area and having about 7% of the world's population, possesses over $14,000,000,000 in gold. In addition to this enormous hoard, which is over half of the world's monetary gold, the United States produces over 50% of several important world commodities. Commenting on this "bulging economy," the London Sphere observed that "responsible leadership which cannot translate it into assured prosperity is destitute of capacity."[1]

Poverty and Spiritual Welfare

It is a great mistake to assume that opinions unanimously desire increased productive income.

1. Sphere, London; quoted in 12,000 Tons of Gold! Howard H. Preston, Credit and Financial Management, August 1938, p. 10, Vol. 40, No. 8.

There are persons, rich and powerful, who believe that "proper monkeying" with the monetary media is necessary for the spiritual welfare of the working people. Furthermore, the workingman is more tractable if he is not quite sure where his next meal is coming from. It is well recognized that workingmen become too independent during periods of prosperity and that during depressions they work harder to keep their jobs. A quotation from Business Week of October 22, 1930, will serve to throw some light on this:

> "When a Governor of a Federal Reserve bank can stand up before a convention of investment bankers, condemn the American people for using automobiles, electric refrigerators, and radios, and proclaim that he does not agree with those who say that there must be no retrogression from present standards in this country, we need no further sign of the arrogant self-assurance of the night-riders of defeatism."

These lofty sentiments were well supported with action. In the United States bankers directed a deflation of over $9,000,000,000. Bankers are certainly entitled to their opinions, but whether or not they are entitled to a monopoly of credit is, at least, a controversial matter. Other people, furthermore, are entitled to an opinion and, under the circumstances, bankers can hardly complain if other thinking

people become less unsympathetic with direct-action Marxism.

An Irreconcilable Clash of Interests

The primary duty of a country's economic system should be to provide the necessities and comforts of life, but the primary concern of those who control the country's finance is to create scarcity. There is therefore an irreconcilable clash of interests. "From the standpoint of the professional money-lender, and from his alone, prosperity is a curse."[1] During war times we can safely produce at capacity for destructive purposes. But it is not good business, although it might be wise sociology, to produce at near capacity for consumption purposes in times of peace. Any sane man, ignoring human greed, could work out an economic system that would work better on paper than the one with which we are now handicapped. It is, however, futile to call our economics of scarcity, insanity. There is nothing insane about it. In fact, from the point of view of financiers who profit by it, it is ingenious.

---

1. The Role of Money, Frederick Soddy, p. 118.

Cooperation with Moscow

Since shortly after the World War it has been the hope and the expectation of the Soviets that the end of capitalistic civilization is only a matter of time. They have done much during the intervening years to speed the "happy" day. No one will deny that they have been remarkably successful. The spread of international communism is one of the most amazing political phenomena of our times. Not only have communists gained control of important governments, but they have also gained a fearsome political influence in every important democracy in the world. A few years ago the Third International adopted the so-called "united front tactics" and for a time, at least, and in carefully chosen places, abandoned their more aggressive direct action policies. Very likely, well-posted leaders of world communism have decided that individualistic capitalism will destroy itself, as Marx forecast. If we wish to cooperate with Moscow and our financiers in the speedy destruction of American institutions, we can find no better way than to permit the periodic unsettling of the price level and the creation of artificial scarcity.

Scarcity alone does not make men better. There is probably no place in the world where men are

more resigned to conditions of want than in China, where there have been serious famines every year for the past two thousand years. It is scarcity, with abundance all around, that embitters men. It is asking too much of a hungry man to love the society that lets him starve while granaries are full of food.

A Financial Miracle

Since 1931, our number-one enemy, Germany, has made remarkable progress. Industrial production has risen over 130%. Nevertheless, the price level has remained stable.[1] During 1938 production has been stabilized at a high level. For several months there has been a condition approximating full employment; in fact, the German government has found it necessary to import thousands of laborers from Italy and other neighboring states. It is comforting to realize that the alleged financial wizardry was performed by a world-famous financier, who is not in sympathy with Hitler -- Goering -- Goebbel's madness. The fact that Germany has become a dangerous power of the first class is not due to anything so frail as Hitler's ranting, but rather to the amazing increased productivity of Germany. The increased productivity was made possible through the creation of government credit, under the

1. The Annalist, December 21, 1938, p. 821, Vol. 52, No. 1353.

careful management of Dr. Schacht, who has long been an advocate of managed currency and who belongs to the same school of monetary thought as Professor Irving Fisher. Dr. Schacht has demonstrated what he and other members of the managed currency school have claimed all along -- that it is possible to increase productivity, without a rise in the price level, through the creation of government credit.

Since April, 1938, Germany is no longer financing with government credit. Production is maintaining itself at a high level and it is now possible for the Reich to pay current expenses out of taxes placed upon the increased output. As Dr. Schacht put it:

> "Spring, 1938, brought a change in our finance policy, because at that time Germany had reached a stage of full employment. As soon as an economy has made use of all available labor and materials, any further credit expansion is not only senseless but actually harmful. For then newly created money can no longer effect a further increase in goods production, but can only bring about competition for the available labor and raw materials; and such a competition must necessarily lead to an increase in prices and wages, despite all measures of State control ..... The numerous measures which were undertaken ..... were in every case aimed at control of the credit expansion, prevention of a disparity between the money side and the goods side.[1]

---

1. The Annalist, December 21, 1938, p. 829, Vol. 52, No. 1353.

The financial power that is preventing democratic society from accomplishing the same thing that Germany has accomplished since 1931, is the power that will yet ruin democratic society.

The Guiding Hand

The most formidable opposition to stabilization has come from bankers; that is, from the officials of central banks and from powerful private banking houses which have invisible connections with central banks. These private banking houses fight in the dark. Monetary legislation designed to effect greatly needed reform is defeated by their agents who are sometimes members of legislatures. Their magazines and newspapers pay the highest prices to the cleverest columnists, and their banks quietly bring pressure at critical times upon business and government until they have their way. In the United States the Federal Reserve banks are private banks. The capital stock is owned by the member banks. This ownership of stock in the central banks gives private bankers another means of accomplishing their extra-official influence on monetary and credit management. Powerful financiers who remain in the background actually own the central banks of the nation. Furthermore, bankers feel that

they alone should be allowed to write all banking legislation. Why, we might ask, should not whiskey dealers write all legislation pertaining to their industry? The resulting demoralization of society would hardly compare with that resulting from modern laissez-faire financialism. Bankers are the last people in the world to trust with the writing of monetary legislation.

Demagogues

There is doubtless some honest fear among bankers of outside meddling. Regulation, however, is necessary if democratic institutions are to survive. Able thinkers of the past and of the present foresee the collapse of our society, built as it is upon financial liberalism. Pope Pius IX and Karl Marx agreed on this and both pointed out that this breakdown was inevitable. Today, when all the evils of such a system are coming to a head, is no time for calling names. If one happens to disagree with Mr. Montague Norman in England or with Senator Carter Glass, in the United States, he is labeled "demagogue." Among these "demagogues" in England are to be found such names as the Right Hon. Reginald P. McKenna, former Chancellor of the British Exchequer, Mr. R. G. Hawtrey,

probably the greatest living authority on prices, and Mr. John Maynard Keynes, whose "demagogue" forecasts in 1925, when Great Britain returned to the gold standard, proved only too true. In the United States, Professor George F. Warren, and other recognized authorities on money and prices, gave similar warnings of the collapse that was to be expected from the scramble for gold.[1]

Professor Soddy, Nobel Laureate for Chemistry, in 1921, conducted extensive investigations in monetary economics to find the reason why great advances in science and technology are not passed on to the working class. His researches, as well as those of other independent monetary economists, led to the conclusion that there is a sinister oligarchy determined to retain power through private control of our monetary and credit media.

The sinister influence of private bankers is illustrated by the experience of Senator Owen, who tried to have mandatory stabilization provisions written into the original Federal Reserve Act. The opposition, the source of which he did not at that time recognize, was the "invinsible house" type of opposition. Carter Glass was its agent. The mandatory

---

1. Gold and Prices, Warren and Pearson, pp. 107-116.

provision was stricken out by Glass, who was advised by another sinister figure in banking affairs, the late H. Parker Willis. Willis' books suggest what Soddy meant by "supposed impartial students of money"[1] and contain the most flagrant misstatements of fact. For example, in a book published in 1936, Willis wrote: "During the years after 1923 the Federal Reserve System undertook several extensive operations intended to bring about an advance in commodity values but had no success in its undertaking."[2] This is but one of many misstatements of which his book contains scores. The extensive operations to which Willis refers are the purchase of $510,000,000 of government securities prior to September 1924, and the lowering of the rediscount rate in that year. Willis' statement that these operations met with no success in bringing about an advance in commodity values is a misstatement of fact that can easily be checked. By March 1925, the general price level had risen 11%, and agricultural prices had increased 20%. These facts can easily be verified by examining any one of numerous commodity price indexes. Whether or not the general price level can be raised is a vital question. Willis must have known the real facts, and the private bankers, whose interests are at stake, know the facts. The thievery of modern deposit banking

---

1. The Role of Money, Frederick Soddy, p. 197.
2. The Theory and Practice of Central Banking, p. 300.

is accomplished through dishonest accounting, and the defenders of this trickery are accessories every bit as culpable as their principals.

Power without Responsibility

Members of the Federal Reserve Board refuse to admit that they have managed credit, yet it has been during the life of the Federal Reserve System that gold has been sterilized and that the volume of credit has been controlled with utter disregard for the alleged automatic qualities of the gold standard. Credit was controlled in accordance with the "needs of trade," and the "needs of trade" were determined by the Federal Reserve Board. Such control involved occasional wholesale destruction of the nation's media of exchange. Since there were no rules, the destruction took place at the arbitrary whims of the Board.

Responsibility and authority should go together. While tenaciously retaining the authority and the power to change the price level, the Federal Reserve Board has disclaimed all responsibility for stabilization. At times members of the Board have claimed that the Board had no such powers; at other times certain members of the Board admitted that they had, but they always insisted that control of the price level should be a matter of administration. The Board was to be

allowed to decide when the price level was to be raised, when it was to be lowered, and when it was to be stabilized. That is a great deal of power to concede to a Board that disclaims any such capacity. Nevertheless, the Board did control, but in such a way that for the past twenty years price indexes look like roller coasters. Without any fundamental policy, and rarely taking into consideration the public's interest in a stable price level, the Federal Reserve Board moved the price level around in a range wider than at any time during the past one hundred fifty years.

There was no reason for a business depression from 1930 to 1936 in the United States other than that of misdirected credit control of the Federal Reserve Board. The "deflationists" were in the saddle. They took upon themselves, without any mandate from the public, the right to deflate everything -- including the Republican Party.

Private or Political Dictators

Of course there must be price-level management, but where is the far-reaching power of management to be placed? Those who control the price level are actual dictators. As Professor Edie says:

> "A group of institutions that can determine the price level of the world has a greater power over the economic fortunes of mankind than do all the Parliaments and Congresses combined."[1]

Are we going to take these dictatorial powers from the banks and hand them to self-seeking politicians who are little better than racketeers? We have done something of the sort during this administration. The tieup between the government and the banks is such that inflation and deflation are now initiated in Washington. Before the Pujo investigation the power was in Wall Street. Since 1913, it has been hard to locate the ultimate source of control, but the Federal Reserve Board did the work. Since 1933 the White House is the responsible source, which, incidentally, makes our President the most powerful ruler in the world. On October 23, 1935, at Charleston, South Carolina, the President said:

> "We are on our way back -- not by mere chance. We are coming back more soundly than ever before because we planned it that way, and don't let anybody tell you differently."

The President's inflation-deflation moods have been highly volatile. The whipsawing of the

---

1. Dollars, Lionel D. Edie, p. 200.

markets is a little more exciting since 1933; the moves are a little more obvious, but it is the same game. It is to be hoped that the President will not develop a passion for liquidity before 1940. However disconcerting the jerky monetary moves of the present administration are, they constitute additional proof of what monetary economists have held all along: the trade cycle can be reversed by the monetary authorities. This was proved when monetary management was subject to Wall Street control. It was proved again between 1921 and 1929. Now, the moves are a little more obvious. First, the administration orders full steam ahead; then, the brakes are applied so hard that the economic machine stalls. In 1937 the engine was stalled; in 1938, the order was: "full steam ahead; there's an important election in the fall." Inflation and deflation are being timed to election requirements instead of to the business cycle.

Political observers believe that the heavy government expenditures of 1938 were timed about eight weeks too late to bring the election results that New Deal statesmen expected at the polls. However, the financial adequacy, if not the timing of New Deal election preparations, was excellent. In a single week in April, more than two billion dollars of inactive

cash was released. The United States Treasury desterilized one billion four hundred million dollars of inactive gold. During the same week, the Board of Governors of the Federal Reserve System lowered reserve requirements of member banks, thereby making an additional three-fourths of a billion dollars available as a basis for credit expansion.[1] From July 31, 1938, to November 30, 1938, the public debt increased by $408,000,000 a month. This monthly increase in the federal debt was nearly double the increase of any other month in history, except for June 1936, the month in which the adjusted service certificates were cashed.[2] Now that the election emergency is past federal expenditures are "tapering off." In the New Deal lexicography "tapering off" means sudden curtailment of expenditures by hundreds of millions of dollars a month.

In general, political control is worse than private control. Politicians are constantly under the influence of pressure groups and of wealthy constituents with very dull axes to grind. They are dependent for their jobs on the endorsement of their local political machines which have never been famous for their

1. 12,000 Tons of Gold, <u>Credit and Financial Management</u>, Howard H. Preston, August 1, 1938, p.6.
2. <u>The Annalist</u>, December 7, 1928, p. 753.

social ethics. It will be regrettable if any political party arrogates to itself the right to control credit and consequently the price level. Eventual dictatorship would be the inevitable result. Indeed, such a situation is a virtual financial dictatorship.

A Monetary "Supreme Court"

Proposals have been made to take the control of money out of politics and also out of private hands. Such plans provide for some kind of a commission that would be independent of political parties and of the banks. The commission would coordinate the various activities of the Treasury and the Federal Reserve Board. It would also have control over the volume of money and credit that would be issued. Advocates of this scheme describe it as a "Supreme Court" of money. Its governors would be appointed for long periods of time and would be expected to be disinterested public servants, as the members of our Supreme Court are, theoretically.

Unfortunately, whether financiers or politicians, or some other group of greater dignity is placed in control of money and credit, society will still have to contend with the human element. There is a great deal at stake. Where there are great sums

of money involved there will always be tricksters. Experience with various political systems during the past century should have taught us that the solution is not to be found in systems, which the greedy will find some way to circumvent. The law must be definite. The representatives of all the people, Congress, should make the rules mandatory. Let us put the cards on the table. There has been altogether too much dealing under the table. To no man or group of men should be delegated the administrative responsibility or power to decide such vital matters as the increase or decrease of the quantity of the media of exchange, the control of the price level, or inflation and deflation. An election year, the fortunes of a political party, foreign interests, or the financial position of a particular group, should have no weight in the determination of the degree of prosperity to be enjoyed by the nation.

Numerous Stabilization Proposals Feasible

It is sometimes claimed that the stabilizationists themselves cannot agree as to how price levels should be stabilized. This view of the situation is greatly exaggerated; the differences of opinion are limited as to method only. Among advocates of stable money there is much agreement and only good natured

difference of opinion as to details. On the other hand, there can be no cordial difference of opinion between stabilizationists and the opposition which, in reality, is sponsoring a fraudulent system of bank accounting. There can be no compromise with dishonesty. Why merely argue with a group who are feathering their own nests at the expense of society, while constitutional democracy is in danger of perishing? Stabilization is not merely a gentleman's debate. Why pussyfoot about it? The situation has, and should have, all of the enthusiasm of a civil war.

There are numerous stabilization proposals which, though widely different in method, would bring about the desired degree of stabilization. For the same reason that inflation can occur in countries using paper, gold, silver, or credit, stable money can undoubtedly be attained in systems using any combination of the media of exchange.

Stabilization without Gold

What the future of gold will be in the money world is problematical. However, it is still an ideal material for the settlement of international foreign trade balances, and because of its intrinsic qualities will always serve that purpose well. In spite of the

fact that practically every country in the world has gone off gold, it is still the most universally acceptable commodity. Except in France and other countries in the gold bloc, gold in physical form has practically ceased to be used for currency, and leading bankers are beginning to realize that it is not necessary for reserves. If gold were divorced from domestic currencies, the nervousness that has characterized the capital markets in recent years -- the abrupt shifting of gold balances -- would not have the upsetting effect on domestic economies that is the case when gold reserves are considered essential.

When too closely related to circulating currencies gold has been used as an instrument of international tyranny and domestic oppression. Far from encouraging the stabilization of price levels, it has been the fundamental cause of deflation and of business depressions for over a century. It is mainly responsible for internal unrest and for most of the great wars since the industrial revolution. It lacks the elastic qualities necessary for a good money and it lends itself to the worst kind of mismanagement. In the past it has been exclusively a fair-weather standard. In recent years, because of vicious mismanagement and greed, it has not been

possible for nations to stay on the gold standard even in peace times. Attempts will be made to devise ingenious schemes to retain many of the objectionable features of the traditional gold standard, but the world is becoming less and less tolerant of monetary trickery. The virtuous fatalism of our fathers in these matters is history. Too many are aware that most deflations are not the result of "natural" causes, and that the idea that they are is a carefully sponsored deception. Large-scale discontent among those who do not recognize the underlying monetary cause of deflation has brought on irrational revolutions in some parts of the world, a fact which should be a warning to those responsible for deflation here.

The world rejoiced when Great Britain and other countries returned to the gold standard in 1925, but the great advantages of that much desired blessing proved rather obscure. It is needless to reckon with the prospect of another return to the traditional nineteenth century gold standard. The economic and banking world could not possibly find a way to make it work. The gold standard was considered equally as radical at the time of its inception as are the newer money proposals of today. In a few decades, our

possible for nations to stay on the gold standard even in peace times. Attempts will be made to devise ingenious schemes to retain many of the objectionable features of the traditional gold standard, but the world is becoming less and less tolerant of monetary trickery. The virtuous fatalism of our fathers in these matters is history. Too many are aware that most deflations are not the result of "natural" causes, and that the idea that they are is a carefully sponsored deception. Large-scale discontent among those who do not recognize the underlying monetary cause of deflation has brought on irrational revolutions in some parts of the world, a fact which should be a warning to those responsible for deflation here.

The world rejoiced when Great Britain and other countries returned to the gold standard in 1925, but the great advantages of that much desired blessing proved rather obscure. It is needless to reckon with the prospect of another return to the traditional nineteenth century gold standard. The economic and banking world could not possibly find a way to make it work. The gold standard was considered equally as radical at the time of its inception as are the newer money proposals of today. In a few decades, our

present stabilization theories may have become the conservative practice.

Nations need not mourn the passing of the traditional gold standard as the passing of a venerable or worthy institution. It is neither very ancient nor very honorable. It was constructed originally in England shortly after the Napoleonic Wars, and was sponsored by the type of money lender that "lent Napoleon £5,000,000 off the London money market to fight the Battle of Waterloo."[1] In the large perspective of world history, the years since the Napoleonic Wars are but a short period. At various times during those years England and other countries found it impossible to adhere to the gold standard, and the few short intervals during which it has worked, and, rather badly, at best, hardly entitle it to veneration either for its age or its efficiency. As an episode in the monetary history of the world, the gold standard era will be looked upon as the classical example of unsound finance. It is unthinkable that such a standard should be restored.

---

1. The Breakdown of Money, Christopher Hollis, p. 14.

Mandatory Stabilization

The domestic price level should be controlled without regard to the value of gold. As James Harvey Rogers pointed out in 1936:

> "Without exception, recovery has progressed to a very great distance in the countries that have reduced conservatively the values of their currencies. On the contrary, you will find that in not one single other country (except those engaged in extreme military preparations) has recovery even started."[1]

If there is to be any connection between domestic currency and gold, the price of the monetary unit should be subject to change in accordance with rules that have been established by law, and not determined by the arbitrary whims of some administrator. These rules should provide for rather infrequent changes depending upon the action of the price level. The present price of gold established by the government may be too high or too low. The supply and demand relationships for gold may prove to be different from those our government expects, in which case the price should be changed and our monetary authorities should be required by law to make the change promptly.

---

1. The Annals of the American Academy of Political and Social Science, July 1936, Vol. 186, p. 37.

A Concession to Silver Producers

There is a little monetary reason why silver should constitute any part of a domestic currency. However, like gold, it can be used in international trade in dealing with countries that are on a silver standard and, like gold, it can be hoarded by governments as a war chest. During the World War the United States government sold silver dollars amounting to $260,000,000 to India at a price which was above the gold parity of silver dollars.[1] The purchase of hoards of silver by our government is admittedly a concession to silver producing senators. It is also an important part of our so-called "good neighbor" policy with Mexico. The purchase of silver for silver certificates increases the quantity of this kind of paper in circulation and probably does no harm. There are so few things that the United States will accept in exchange for a chronically favorable trade balance that the importation of silver helps to correct the balance. Of course the purchase of domestic silver at a premium is a welcome subsidy to the stock holders of the few very large silver mining companies.

1. Money and Banking, John Thom Holdsworth, p. 57.

Control of Credit

There should be some preference for plans that would not alter existing monetary institutions needlessly. Over 90% of our business is done with credit. Therefore, in the United States, stabilization plans should emphasize the control of credit, preferably through automatic and progressive changes of the rediscount rate and open market operations. However, some important changes must be made in the institutions that control credit and in the laws which guide control.

Nationalization of Central Banks

One of the great hindrances to proper management of credit is the fact that twenty-four private banks, which control about a third of the banking resources of the nation, also dominate the Federal Reserve banks.[1] It is highly desirable, in the interests of the smaller banks and of the whole country that the twelve Federal Reserve banks should be nationalized and freed from the influence of the powerful twenty-four. A bill providing for government ownership of the Federal Reserve banks was sponsored by one hundred fifty members of the House of Representatives.[2] However, the American Bankers' Association fought the bill. It

---

1. Congressional Record, November 17, 1937, p. 76. Vol. 82, 75th Congress, 2d Session Appendix.
2. Ibid.

appears that the officials of the twenty-four great banks dominate the American Bankers' Association as well as the central banks. It would probably be suicidal for a small bank to antagonize these powerful financiers. Because of the nature of banking, the concentration of power in the hands of a few banking houses constitutes a virtual monopoly.

While government ownership of the central banks is urgently needed, the nationalization of banks in general is to be avoided at all costs. Beyond the control of monetary policy, the volume of currency and the price level, the government should stay out of the banking business. Furthermore, Federal agencies should, as quickly as possible, go out of the small credit business. Government financing of mortgages and other government ventures into the loan business is to be deplored. Commercial banking cannot possibly be carried on efficiently from Washington. If the government creates a condition in which the banks can operate soundly and without fear of recurring monetary deflation, there will be no need of the government's selling mortgages on $3,000 homes.

<u>The Minting and "Unminting" of Credit</u>

Whether or not central banks are nationalized, the private creation and destruction of credit

should cease. This does not mean that the business of making loans should be taken away from commercial bankers. Local bankers are obviously best qualified to pass judgment on the financial integrity of individual borrowers. It is deflation of the total quantity of credit that constitutes the most vicious injustice of modern deposit banking. If the Federal Reserve banks were to collect all of the government and bank notes that have been issued, place them in a pile and burn them, we would all understand better the relation between contractions of the media of exchange and business depressions. Between 1929 and 1933 something of the sort actually happened. The banks destroyed the deposit currency, $9,000,000,000 of it, an amount greater than the total note issue outstanding. Through the calling of loans and the refusal of the banks to make new loans, synthetic bank credit shrank almost continuously until 1933. The requirement of 100% reserves would correct once and for all this evil of minting and "unminting" our money supply. Eventually bankers themselves may see the wisdom of keeping 100% reserves. The existence of actual money behind their loans would free them from the "moral suasion" which gives them no choice but to ruin their customers by calling legitimate loans when the "guiding hand" cracks the whip.

Year to Year Growth

Experience has demonstrated that there is a growth of business volume per capita from year to year, and since the increased volume of business requires an increased volume of currency to prevent a fall in prices, monetary authorities should provide steadily increasing volume of credit, an increase of about 3% per year.

Balancing the Budget

On December 18, 1937, Representative Ludlow, a member of the Appropriations Committee, pledged his support to the President's program to hold appropriations down to the budget estimates and argued that the country needed "a government economy tonic .... to rekindle confidence and to start America humming."[1] Naturally the budget will have to be balanced sometime. We can't go on forever spending borrowed money without repaying it. However, the important budget question is not whether the budget should be balanced sometime, but when and how it should be balanced. Unfortunately, the "economy tonic" of 1937 started a trend which the unkind described as "a Roosevelt depression" -- one that we did not "plan that way."

---

1. Congressional Record, December 18, 1937, Vol. 82, Part 3, Appendix, 75th Congress, 2d Session, p. 607.

The balancing of the budget is desirable but not urgent, and it certainly should not be balanced in the way that some of our supposedly conservative financiers propose. In estimating the debt burden we must take into consideration the wealth and income possibilities of the debtor. The claim that the country's credit is impaired is not only not the truth; it is the reverse of the truth. Instead of there being a flight from the dollar, as many predicted, billions of dollars of gold are being sent to the United States -- evidence of a flight to the dollar. Our dollar is not too weak; it is too strong. The problem of balancing the budget in the United States is not as difficult as is the problem in most European countries. For example, there are, in all the financial capitals of the world, the recurring periods of anxiety over the almost chronic French financial crises. Basically, this is a budget problem. With a total national income of 250,000,000,000 francs per year France is supporting a budget of over 85,000,000,000 francs, a sum which is over a third of the total national income.[1]

The claim that the more the government borrows, the higher taxes will be, also seems to be the reverse of the truth under certain circumstances.

---

1 Foreign Affairs, July 1938, pp. 601-611; Vol. 16, No. 4, Charles Rist, The Financial Situation in France.

Taxes are proportionate to national income. The increase of national income which accompanies government deficit financing may be so large that the percentage of national income taken in taxes is actually reduced. Friends of the Administration point out that a national income of $65,000,000,000 in 1937, compared with a $40,000,000,000 income in 1933, more than warrants the claim that the percentage of taxation has been reduced. This point of view is even more understandable if the profits of individual corporations are compared for various years during the years of depression and revival. One corporation is reported to have increased its profit from $161,000 in 1931, to $190,000,000 in 1936.[1]

Common Sense Deficit Financing

Nevertheless, it is needless to saddle the country with a large interest-bearing debt. The debt should have been non-interest bearing. The credit of the United States should have been used instead of borrowing bank credit. The credit of the United States is greater than that of the banks and the government should use its own credit, without paying interest, up to the point where the price level is restored. Payments for government spending with money or credit

---

1. Congressional Record, February 14, 1938, Vol. 83, Part 9, Appendix, 75th Congress, 3rd Session, p. 610.

raised through bond issues is even more inflationary than if payment is made with legal tender notes, because of the interest on the bonds. The most direct way is the best way. When prices are below normal government bills should be paid with greenbacks; when prices are normal the budget should be balanced through taxes; when prices are above normal, taxes in excess of current expenditures should be levied to retire the national debt.

Not only was the Government's deficit financing improperly managed, but it was stopped before a stable self-sustaining recovery of business began. According to the Cleveland Trust Bulletin, receipts from taxes were so great by the end of 1937 that the Government was taking from purchasing power as much as it contributed.[1]

Whenever possible, governments should take advantage of falling prices to retire government bonds. Legal tender notes should be issued in sufficient quantities to restore prices to a just level and to sustain them at that level. Congressman Burdick asks: "If the Government's name is good on $36,000,000,000 of bonds, where is the man who can say that the Government's name on currency certificates would not be equally as good?"[2]

---

1. The Cleveland Trust Bulletin, March 15, 1938.
2. Congressional Record, March 12, 1937, Vol. 81, Part 9, Appendix, 75th Congress, 1st Session, p. 537.

Progressive Inflation Taxes

Progressive taxes on incomes and an inflation tax would effectively prevent an undue rise in prices. Tax the profits from an excessive rise in stocks, grain, etc. Why ruin prosperity merely because the stock market or the commodity markets have gotten out of hand? A tax on the inflation profits of any and all markets would effectively end the fear of either general inflation, or of inflation in any particular market. The profit from an incipient inflation of any kind would then go to the Government to retire the national debt. Politically, placing a tax on inflation might not be so easy. It was unpopular in 1929. However, if stock market profits, or better still, stock prices had been taxed progressively in 1929, Federal Reserve bankers would not have found it necessary to create a major depression to end the insanity of that year. Any tax, including our existing progressive income tax, is deflationary. Therefore, it is hard to imagine how a general inflation of any proportions could occur in the United States for some time to come, since the national debt would be retired through our present income tax before the inflation got beyond the initial stages. As profits began to rise, rising income tax receipts would have an anti-inflationary effect.

The Trade Cycle -- A Monetary Phenomena

Messrs. Foster and Catchings quote R. G. Hawtry as concluding "that the trade cycle is purely a monetary phenomenon."[1] Therefore, those who would understand the business cycle must understand money. But, unfortunately, money as it is managed, or rather, mismanaged in our modern pecuniary economy, becomes a highly complex mystery, quite as mysterious as the faker's wheel, and for the same reason -- because the manipulator is dishonest. It is hard to keep up to date with changes in monetary and banking practices. The banking act of last year becomes history in a surprisingly short time.

Not only is this a serious social matter, but it is also a practical business consideration. What the business man should know and know well is MONEY. A desire to remain in business should be accompanied by a willingness to do the necessary research to keep up-to-date in financial matters that may seem entirely unrelated to an individual's particular business. Some business men think that they and their business friends have a monopoly of horse sense and that monetary theorists have the kind of sense that is commonly attributed to the horse's cousin. These self-satisfied gentlemen

1. Money, Foster and Catchings, p. 12.

will probably mind their own business and the internal economics of their business. They will let the Federal Reserve Bankers mind their own business -- the shady, stealthy business of inflation and deflation -- and these business men, for all of their common sense, will presently be out of business.

Liberty and Abundance

There is considerable debate as to the most efficient devices for attaining all the advantages of advancing technology and at the same time the advantages of individualistic capitalism with its profit system. However, there can be no doubt that we can enjoy these advantages together. If it were not for the "false accountancy"[1] of the banking world (namely, the creating of deposits when loans are made), these advantages would be brought about in somewhat the following manner: advances in industrial science would reduce costs and would therefore have a depressing effect on the price level. The price level would be controlled and sustained by year to year increases in the monetary media. A combination of the two, decreasing costs and a controlled price level, would increase prospects of profit. Now, prospects of profit are known to have a cumulative effect on business revival. Cumulative business revival has always brought competitive bidding for more competent workers and has consequently raised wages.

---

1. The Role of Money, Frederick Soddy, p. 197.

Angas, L.L.B., The Slump Ahead in Bonds, 461 8th Avenue, New York; Somerset Publishing Company, 1937

Angell, Norman, The Story of Money, Garden City, New York; Garden Publishing Company, Inc., 1929

Angell, Sir Norman, The Money Mystery, An Explanation for Beginners, London, J.M. Dent and Sons, Ltd., 1936

Beard, Charles Austin, The Economic Interpretation of the Constitution of the United States, New York, Macmillan

Cassel, Gustav, The Crisis in the World's Monetary System, Oxford, at the Clarendon Press, 1932

Cassel, Gustav, The Downfall of the Gold Standard, Oxford, at the Clarendon Press, 1936

Cassel, Gustav, The Theory of Social Economy, New York; Harcourt, Brace and Company, 1924

Cole, G.D.H. (editor) What Everybody Wants to Know about Money, A Planned Outline of Monetary Problems by Nine Economists from Oxford; New York, Alfred A. Knopf, 1933

Coogan, Gertrude M., Money Creators, Chicago, Illinois; Sound Money Press, Inc. 1935

Coyle, David Cushman, Brass Tacks, Washington; National Home Library Foundation, 1936

Crowther, Samuel, et al, A Basis for Stability, Boston; Little, Brown and Company, 1932

Del Mar, Alexander, History of the Precious Metals from the Earliest; New York; Cambridge Encyclopaedia Company, 1902

Edie, Lionel D., The Banks and Prosperity, New York; Harper and Brothers Publishers, 1931

Edie, Lionel D., Dollars,
New Haven; Yale University Press, 1934

Edie, Lionel D., Easy Money,
New Haven; Yale University Press, 1937

Edie, Lionel D., Money, Bank Credit and Prices,
New York, Harper and Brothers Publishers, 1928

Fisher, Irving, Assisted by Cohrssen, Hans R.L., Stable Money, New York, Adelphi Company, 1934

Fisher, Irving, The Money Illusion,
New York; Adelphi Company, 1928

Fisher, Irving, Stabilizing the Dollar, A Plan to Stabilize the General Price Level without Fixing Individual Prices, New York; The Macmillan Company, 1920

Fisher, Irving, 100% Money,
New York; Adelphi Company, 1935

Fraser, H.F., Great Britain and the Gold Standard, A Study of the Present World Depression, London; MacMillan and Company, Ltd., 1933

Foster, William Trufant, and Catchings, Waddill, Money, Boston and New York; Houghton Mifflin Company, 1932

Goodbar, Joseph Ernest, Managing the People's Money, New Haven; Yale University Press, 1935

Hawtry, R.G., Currency and Credit,
New York; Longmans, Green and Company, 1934

Holdsworth, John Thom, Money and Banking,
New York; D. Appleton and Company, 1925

Hollis, Christopher, The Breakdown of Money,
New York; Sheed and Ward, Inc., 1934

Holter, E.S., The ABC of Social Credit,
New York; Coward McCann, Inc., 1934

Kemmerer, Edwin Walter, Kemmerer on Money, Philadelphia; The John C. Winston Company 1934

Keynes, John Maynard, Economic Consequences of the Peace New York; Harcourt, Brace and Howe, 1920

Keynes, John Maynard, The General Theory of Employment, Interest, and Money, New York; Harcourt, Brace and Company, 1936

Keynes, John Maynard, Monetary Reform, New York; Harcourt, Brace and Company, 1924

Keynes, John Maynard, A Treatise on Money, Volume I, The Pure Theory of Money, New York; Harcourt, Brace and Company First published 1930

Keynes, John Maynard, A Treatise on Money, Volume II The Applied Theory of Money, New York; Harcourt, Brace and Company First published 1930

Keynes, John Maynard, Unemployment as a World-Problem, Lectures on the Harris Foundation 1931 Chicago, Illinois; The University Press 1931

Laughlin, J. Laurence, Money and Prices, New York; Charles Scribner's Sons, 1924

Loeb, Harald, et al, The Chart of Plenty, A study of America's Product Capacity Based on the Findings of the National Survey of Potential Product Capacity, Harold Loeb, Director of the N.S.P.P.C. and Associates, with a foreword by Stuart Chase, New York; The Viking Press, 1935

Morgan-Webb, Sir Charles, The Money Revolution New York; Economic Forum, Inc., 1925

Nadler, Marcus, and Hogan, Jules I., The Banking Crisis, The End of an Epoch, New York; Dodd, Mead and Company, 1933

Nourse, E.G. and Others, America's Capacity to Produce, Washington, D.C.; The Brookings Institution, 1934

O'Neil, Leo Drew, and DiVenuti, Biagio, Money, Bank Credit and Prices, Mimeographed Copy, Boston University Book Store, 1935, Revised Edition.

Rohlfind, Charles C., Carter, Edward W., and West, Bradford, Hervey, John J., Business and Government, Chicago; The Foundation Press, Inc. 1934

Salter, Sir Arthur, Recovery, The Second Effort, New York; The Century Company, 1932

Soddy, Frederick, The Role of Money, New York; Harcourt, Brace and Company, 1935

Thomas, Brinley, Monetary Policy and Crises, A Study of Swedish Experience, London; George Rontledge and Sons, Ltd., 1936

Warburg, James P., The Money Muddle, New York; Alfred A. Knopf, 1934

Warren, George F. and Pearson, Frank A., Gold and Prices, New York; John Wiley and Sons, Inc., 1935

Willis, H. Parker, and Chapman, John M., et al, The Economics of Inflation, The Basis of Contemporary American Monetary Policy, Part I; Morning Side Heights, New York; Columbia University Press, 1935

Willis, Henry Parker, The Theory and Practice of Central Banking, With Special Reference to American Experience -- 1913-1935, New York; Harper and Brothers Publishers, 1936

Winslow, F. Truman and Brough, Bruse, Money and Its Power, Foreword by Owen, Robert L. Washington, D.C.; National Home Library Foundation, 1935

Woodward, Donald B. and Rose, Marc A., A Primer of Money, New York; McGraw-Hill Book Company, Inc. 1932

PERIODICALS

Adams, Orval W., "Balance the Budget -- At Any Cost"
The Bankers' Magazine
Vol. 135, No. 1, pp. 35-36
July 1937

Chase, Stuart, "The Economy of Abundance"
The Journal of the National Education Association
Vol. 24, p. 262, No. 35
Nov. 4, 1935
Washington, D. C.

Ebersole, J. Franklin, "The Money Management Powers of the Treasury and Federal Reserve Banks"
Harvard Business Review
Autumn 1936, Vol. 15, Nov. 1
New York

Goodbar, Dr. Joseph E., "Forestalling Inflation"
The Bankers' Magazine
Vol. 135, No. 1, pp. 37-39
July 1937

Kahn, Walter B., "Trends in Gold Production and Monetary Stocks"
Foreign Affairs
Vol. 14, No. 4, pp. 702-705
July 1936

Kemmerer, Edwin Walter, "The Consequences of Inflation"
The American Mercury
Vol. 38, pp. 265,73
July 1936
New York

Kemmerer, Edwin Walter, "Our American Monetary Position: Where We Are and Whither We Are Going"
Vital Speeches
Vol. 4, pp. 520-2
June 1938

King, Willford I., "Recent Monetary Experiments and Their Effect upon the Theory of Money and Prices"
Journal of the American Statistical Association
Vol. 30, No. 190, pp. 387-400
June 1935

Manuel, Ralph W., "Groping toward an Enduring Prosperity"
The Bankers' Magazine
Vol. 137, No. 1, pp. 43-48
July 1938
Boston

Means, Gardiner C., "Price Inflexibility and the Requirement of a Stabilizing Monetary Policy"
Journal of the American Statistical Association
Vol. 30, No. 190, pp. 401-413
June 1935

Pearson, L. E., "Speech at A.B.A. Graduate School of Banking"
Reported from The Commercial and Financial Chronicle
Vol. 145, No. 3759, p. 217
July 10, 1937

Preston, Howard H., "12,000 Tons of Gold!"
Credit and Financial Management
Vol. 40, No. 8, pp. 6-10
Aug. 1938

Rist, Charles, "The Financial Situation in France"
Foreign Affairs
Vol. 16, No. 4, pp. 601-611
July 1938
New York

Robinson, George Buckan, "100% Bank Reserves"
Harvard Business Review
Summer 1937, Vol. 15, No. 4

Rogers, James Harvey, "The Problems of International Monetary Stabilization"
The Annals of the American Academy of Political and Social Science
Vol. 186, pp. 34-40
July 1936

Sprague, O.M.W., "Prerequisites to Monetary Stabilization"
Foreign Affairs
Vol. 15, No. 2, pp. 303-310
Jan. 1937

Stamp, J., "Monkey Wrenches in the Trade Machine"
Vital Speeches
Vol. 4, pp. 395-7
Apr. 15, 1938

Willis, H. Parker, "America Faces Bankruptcy"
The American Mercury
Vol. 38, pp. 257-64
July 1936
New York

Woolfson, Dr. A. Philip, "Monetary Management and the Problem of Price Stabilization"
The Bankers' Magazine
Vol. 35, No. 5, pp. 381-387
Nov. 1937
Cambridge, Mass.

Zorn, Eugene C., Jr., "Why Our 'Easy Money' Policy Has Failed"
The Bankers' Magazine
Vol. 137, No. 1, pp. 67-70
July 1938
Boston

BULLETINS

The Chase Economic Bulletin

The Chase National Bank
"Technological Progress, the Stability of Business and the Interests of Labor,"
by Benjamin M. Anderson, Jr.
April 13, 1937

The Cleveland Trust Company Bulletin

October 15, 1936
February 15, 1938
April 15, 1938

Midland Bank Review

May, June -- 1938
October, November -- 1933

The National City Bank of New York Bulletin

November, 1937
July, 1937
March, 1938
April, 1938
June, 1938

MONOGRAPHS

Angas, Major L.L.B., Slump Ahead in Bonds, 461 8th Avenue, New York; Somerset Publishing Company, 1937

Ayres, Leonard P., Inflation The Cleveland Trust Company, 1936

Fisher, Irving, The Debt-Deflation Theory of Great Depressions, reprinted from Econometrica, Vol. 1, No. 4, October, 1933

Perkins, James H., The Economic Situation, Extract from the Report to Shareholders of the National City Bank of New York January 11, 1933

Persons, Charles E., Credit Expansion, 1920 to 1929, and Its Lessons Reprint from The Quarterly Journal of Economics, Vol. XLV, November, 1930

REPORTS

Imperial Economic Conference at Ottawa, 1932

His Majesty's Stationery Office Adastral House, Kingsway, London, 1932

Interim Report of the Gold Delegation of the League of Nations, C 375 M 151, 1930